ADMINISTRATIVE DOCUMENT PROCESSING AND APPROVAL

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Document Number: CPCC-00174	Revision/Change Number: 3

Document Type: *(check one)* ☐ Plan ☐ Report ☐ Study ☐ Description Document ☒ Other

Document Action: *(check one)* ☐ New ☒ Revision ☐ Cancellation

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Revision to incorporate authorized limit approvals, and make editorial and reference changes to bring the document up to date.

REVIEWERS:

Name *(print first and last)*	Organization

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Sep 09, 2025

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B. Document Number CPCC-00174 Revision 3

C. Title
Central Plateau Cleanup Company Radiation Protection Program

D. Proposed Internet Address

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Hastings, Gary L Approved - IDMS data file att.
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Hastings, Gary L Approved - IDMS data file att.
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DOE	☐			Y / N
Other	☒	Larson, Craig H	Approved - IDMS data file att.	(Y) / N
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J. Comments

Information Clearance Approval
APPROVED
By Heather Moyer at 11:03 am, Sep 09, 2025

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A-6001-401 (REV 5)

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CPCC-00174
Revision 3

Central Plateau Cleanup Company Radiation Protection Program

Prepared for the U.S. Department of Energy
Assistant Secretary for Environmental Management

Contractor for the U.S. Department of Energy
under Contract 89303320DEM000030

P.O. Box 1464
Richland, Washington 99352

CPCC-00174
Revision 3

Central Plateau Cleanup Company Radiation Protection Program

Document Type: PMP Program/Project: Radiological Protection (RP)

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Central Plateau Cleanup Company LLC (CPCCo)

Date Published
August 2025

Prepared for the U.S. Department of Energy
Assistant Secretary for Environmental Management

Contractor for the U.S. Department of Energy
under Contract 89303320DEM000030

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APPROVED
By Heather Moyer at 11:03 am, Sep 09, 2025

Release Approval Date

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Revision History

Revision	Change	Date	Reason for Revision	Revision Initiator
0	N/A	July 2021	Initial issuance of CPCC-00174.	N/A
1	N/A	April 2022	Editorial corrections to reflect approval date of July 26, 2021; change verb tenses; and Appendix A Requirements Matrix.	CPCC-2203-PIR-0163.
2	N/A	May 2023	This column will list the specific changes that have been made. Revision Initiator column lists the Revision Initiator from Table 2 in CPCC-2203-PIR-163, Rev. 1.	CPCC-2203-PIR-163, Rev. 1
2	N/A	May 2023	Correct Article 722.4.b. to reference §835.703(c)(3).	CPCC-2203-PIR-163, Rev. 1-1
2	N/A	May 2023	Correct the text to state “from the source.”	CPCC-2203-PIR-163, Rev. 1-3
2	N/A	May 2023	Correct the text to state “gray” in the definition of Absorbed dose.	CPCC-2203-PIR-163, Rev. 1-4
2	N/A	May 2023	Change usage in RPP so “Caution” and “Danger” are used consistently with the RCM and the radiological control standard. Change the articles referenced to ensure they use language consistent with the radiological control standard and with 10 CFR 835.	CPCC-2203-PIR-163, Rev. 1-6
2	N/A	May 2023	Edit title of table in 124, 125, and 126 in RPP to be “Criteria for Posting Radiologically Contaminated Areas.”	CPCC-2203-PIR-163, Rev. 1-7
2	N/A	May 2023	Add the bolded and italicized words from RCM Article 125.1a to RPP Article 125.1a.	CPCC-2203-PIR-163, Rev. 1-8
2	N/A	May 2023	Edit RPP #209 so it includes the correct citations [§835.1001(a) and §835.1002(c)].	CPCC-2203-PIR-163, Rev. 1-9
2	N/A	May 2023	Edit the RPP so it includes the verbatim guidance language. This process was verified as accurate in accordance with HMIS.	CPCC-2203-PIR-163, Rev. 1-10
2	N/A	May 2023	Change the RPP so both citations §835.1201 and §835.1202 are noted.	CPCC-2203-PIR-163, Rev. 1-12
2	N/A	May 2023	Correct RPP #174 and RCM Article 755.3 citations to §835.1202(a).	CPCC-2203-PIR-163, Rev. 1-14
2	N/A	December 2023	Remove “radioactive material area” verbiage in RPP 216.	CPCC-CR-2024-0046
2	N/A	December 2023	Replace “should” with “shall in RPP 224.	CPCC-CR-2024-0046

3	N/A	September 2024	Changed the reference from "Appendix H" to "Appendix 4A" in RPP 133 and 136.	2203-PIR-0163, Rev. 2, (1-2)
3	N/A	September 2024	Changed the reference from "Appendix H" to "CPCC-00175, Appendix 4A" in RPP 278-283.	2203-PIR-0163, Rev. 2, (3-8)
3	N/A	September 2024	Changed the weighting factor for Neutrons with energy >2 MeV to 20 MeV from “1” to “10” in RPP 6.	2203-PIR-0163, Rev. 2, (10)
3	N/A	September 2024	Changed reference to “Sections 3.2.3 or 3.3” to “Sections 3.2.3 and 3.3” in RPP 29.	2203-PIR-0163, Rev. 2, (11)
3	N/A	September 2024	Changed reference to “Table 2-2” to “Table 2-1” in RPP 3, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 44, 45, 52, 53, 57, 58, 60, 77, 78, 85, 86, 88, 145, 159, 208, 212, 233, 234, 235, 236, 237, 238 and 242.	2203-PIR-0163, Rev. 2, (12) and CPCC-CR-2025-0701
3	N/A	September 2024	Changed the word “chapter” to “Part” in RPP 120.	2203-PIR-0163, Rev. 2, (17)
3	N/A	September 2024	Changed reference to “Table 2-4” to “Table 2-3” in RPP 121, 122 and 123.	2203-PIR-0163, Rev. 2, (18)
3	N/A	September 2024	Changed “Caution, Radioactive Materials(s)” to all caps in RPP 127.	2203-PIR-0163, Rev. 2, (21)
3	N/A	February 2025	Revised the Restatement of the Requirement for 10 CFR 835.1(b)(1),(2)and(6) wording to reflect the exact text from the current version of 10 CFR 835 in RPP 2.	2203-PIR-0163, Rev. 3, (23)
3	N/A	February 2025	Revised the Policy and Commitment Basis for excerpted and modified Article 112.2.a,b and f to reflect the text as presented in the current version of 10 CFR 835 in RPP 2	2203-PIR-0163, Rev. 3, (24)
3	N/A	February 2025	Changed the words "this part" to "10 CFR 835" in the definition for ALARA to provide consistent terminology between the RPP and RCM in RPP 5.	2203-PIR-0163, Rev. 3, (25)
3	N/A	February 2025	Added titles to references in the definition for Annual Limit on Intake (ALI) to provide consistency between the RPP and RCM in RPP 5..	2203-PIR-0163, Rev. 3, (26)
3	N/A	February 2025	Added titles to reference in the definition for Derived Air Concentration (DAC) to provide consistency between the RPP and RCM in RPP 5.	2203-PIR-0163, Rev. 3, (27)
3	N/A	February 2025	Removed the word "radiation" before the word "source" in the Radiation Area definition to provide consistency between the RCM and 10 CFR 835 in RPP 5.	2203-PIR-0163, Rev. 3, (28)

3	N/A	February 2025	Added the acrynm "STC" to the Restatement of the Requirement and the Policy and Commitment Basis columns to provide consistency between 10 CFR 835, the RPP and the RCM in RPP 5.	2203-PIR-0163, Rev. 3, (29)
3	N/A	February 2025	Add the following words to the Restatement of the Requirement after RPP: "and as allowed by approval of DOE Authorized Limits" and add the words "Compliant: 10 CFR 835*" to the Compliance Status column to indicate that CPCC is fully compliant with the DOE Authorized Limit definition for Tranuranics. in RPP 5.	2203-PIR-0163, Rev. 3, (30)
3	N/A	February 2025	Added reference to "10 CFR 835" to Definition of Cumulative total effective dose to clarify the definition in RPP 6.	2203-PIR-0163, Rev. 3, (31)
3	N/A	February 2025	Added the word "Note" to the Policy and Commitment Basis to clarify the location of the compliance statement in RPP 7.	2203-PIR-0163, Rev. 3, (32)
3	N/A	February 2025	Removed the reference to 10 CFR 835 to provide consistency with 10 CFR 835 and clarify the compliance statement in RPP 13	2203-PIR-0163, Rev. 3, (33)
3	N/A	February 2025	Added reference to the ALARA Management Plan, CPCC-MP-RP-55025 to clarify the location of the Occupational ALARA Program in RPP 17.	2203-PIR-0163, Rev. 3, (34)
3	N/A	February 2025	Added the wording "prior to initiating the activities (See Chapter 2, Section 2.2.2 of this RPP)" to ensure that the compliance statement captures the 10 CFR 835 requirement accurately in RPP 19.	2203-PIR-0163, Rev. 3, (35)
3	N/A	February 2025	Clarified the reference to the RPP in the compliance statements in RPP 21, 22 and 24.	2203-PIR-0163, Rev. 3, (36)
3	N/A	February 2025	Added "2" to the note reference to ensure the proper Note was referenced in the compliance statement in RPP 33.	2203-PIR-0163, Rev. 3, (37)
3	N/A	February 2025	Added "General Employee" and "• Note 4: Non-uniform exposures of the skin from X-rays, beta radiation, and/or radioactive material on the skin shall [§835.205] be assessed as specified in Appendix 2C" to provide consistency between the RPP and RCM in RPP 35.	2203-PIR-0163, Rev. 3, (38)
3	N/A	February 2025	Change the "Appendix C" reference to "Appendix 2C" to correct the reference in RPP 53, 54, 55 and 56.	2203-PIR-0163, Rev. 3, (39)

3	N/A	February 2025	Changed the reference from "direct read" to "pocket and electronic" when referring to dosimeters to provide consistency between the RPP and RCM in RPP 70.	2203-PIR-0163, Rev. 3, (40)
3	N/A	February 2025	Changed reference to RPP "#80" to "#79" in the note to correct the reference in RPP 74.	2203-PIR-0163, Rev. 3, (41)
3	N/A	February 2025	Removed the words "of the CPCCo RPP" to bring the compliance statement into alignment with the RCM and correct the error in RPP 81.	2203-PIR-0163, Rev. 3, (42)
3	N/A	February 2025	Removed the reference to Article 522.2 and add reference to requirement RPP #89 in RPP 90.	2203-PIR-0163, Rev. 3, (43)
3	N/A	February 2025	Changed reference from "Appendix E.1" to "Appendix 3A.1" to correct an editing error in RPP 110.	2203-PIR-0163, Rev. 3, (44)
3	N/A	February 2025	Changed reference from "Appendix E.3" to "Appendix 3A.3" to correct an editorial error in RPP 112.	2203-PIR-0163, Rev. 3, (45)
3	N/A	February 2025	Removed part of the compliance statement from Article 412.3 excerpt that was not part of the 10 CFR 835 requirements in RPP 113.	2203-PIR-0163, Rev. 3, (46)
3	N/A	February 2025	Added the word "Radiologically" to the Article 232.2 excerpt to align the RPP with the RCM in RPP 119.	2203-PIR-0163, Rev. 3, (47)
3	N/A	February 2025	Changed the word "chapter" to "Part" to clarify the compliance statement in RPP 120.	2203-PIR-0163, Rev. 3, (48)
3	N/A	February 2025	Added the words "or DANGER" to the Table 2-4 excerpt to bring the RPP in alignment with the RCM in RPP 124.	2203-PIR-0163, Rev. 3, (49) and CPCC-CR-2025-0053
3	N/A	February 2025	Added Article 222.1 excerpt to bring 10 CFR 835, RPP and RCM requirements into alignment in RPP 126.	2203-PIR-0163, Rev. 3, (50)
3	N/A	February 2025	Changed the words "such as" to "by" to align RCM text with RPP and 10 CFR 835 in RPP 131.	2203-PIR-0163, Rev. 3, (51)
3	N/A	February 2025	Changed the last sentence in the Article 712.4 excerpt to "Records of results should reside in the custody of the originating contract organization, except when the contracted radiological services organization is under contract with the DOE to manage and disposition the records." to implement 2412-TED-0179 Technical Equivalency Determination in	2203-PIR-0163, Rev. 3, (52) and 2412-TED-0179

			RPP 142.	
3	N/A	February 2025	Added the following text "Except as described by Article 722.11," to the front of Article 722.1 excerpt to align the text of the RPP with the RCM and 10 CFR 835 in RPP 144.	2203-PIR-0163, Rev. 3, (53)
3	N/A	February 2025	Changed reference to "Article 731.1" to "Article 731" and added parenthesis around the excerpted text "including zero dose" in order to align the RPP with the RCM in RPP 144.	2203-PIR-0163, Rev. 3, (54)
3	N/A	February 2025	Added the following text to the Article 711.1 excerpt "and with RPPs required by 10CFR 835.101, Radiation Protection Programs." to align the RPP with the RCM in RPP 146.	2203-PIR-0163, Rev. 3, (55)
3	N/A	February 2025	Changed reference to "Article 731.1" to "Article 731" and added parenthesis around the excerpted text "including zero dose" in order to align the RPP with the RCM in RPP 147.	2203-PIR-0163, Rev. 3, (56)
3	N/A	February 2025	Changed Reference to Article 722.8 to Article 722.7.c and corrected the excerpt to read: "Include the following quantities for the summation of the external and internal dose: (c) Cumulative TED" in order to align the RPP requirement with the RCM requirement in RPP 157.	2203-PIR-0163, Rev. 3, (57) and CPCC-2403-PIR-0171
3	N/A	February 2025	Changed "dose equivalent" to equivalent dose" to align the RPP with the 10 CFR 835 requirement terminology in RPP 158.	2203-PIR-0163, Rev. 3, (58)
3	N/A	February 2025	In the Article 771.1 excerpted text, changed the reference to Article "731.1" to "731" to align the RPP with the RCM in RPP 164.	2203-PIR-0163, Rev. 3, (59)
3	N/A	February 2025	In the Article 751.1 excerpted text, changed "Section 5.5" to "Part 5" to aligh the RPP with the RCM in RPP 165.	2203-PIR-0163, Rev. 3, (60)
3	N/A	February 2025	In Article 755.2 referenced text changed "835.1202.2(a)" to "835.1201 and 835.1202" to align the RPP with the RCM references in RPP 174.	2203-PIR-0163, Rev. 3, (61)
3	N/A	February 2025	In the Article 781.1 referenced text, changed "Articles 511 and 521" to "Articles 511.1, 512.1, 521.1.a-d, 522.1, 522.2, and 522.7" to align the RPP and RCM requirements with 10 CFR 835 in RPP 175.	2203-PIR-0163, Rev. 3, (62) and CPCC-CR-2025-0550
3	N/A	February 2025	In Article 781.1 reference, changed Article	2203-PIR-0163, Rev. 3,

			"722.4.e, 722.5.e" to "722.4.b, 722.5.b" to align the RPP with the RCM in RPP 176.	(63), CPCC-CR-2025-0550 and CPCC-2403-TED-0170
3	N/A	February 2025	Changed reference to "Privacy Act of 1974" to "Privacy Act (5 U.S.C. 522a)" to update the RPP restatement and RCM reference to the current 10 CFR 835 text in RPP 181.	2203-PIR-0163, Rev. 3, (64)
3	N/A	February 2025	In Article 781.6 excerpt changed “pursuant to department” to “pursuant to departmental” and below Article 781.6 excerpt, changed the reference to site the current requirements document in RPP 182.	2203-PIR-0163, Rev. 3, (65)
3	N/A	February 2025	Added the following to the Article 621.1 reference: "Proof of completion of a DOE site or activity radiation worker qualification satisfies the requirements for GERT." to align the RPP with the RCM requirement in RPP 184.	2203-PIR-0163, Rev. 3, (66)
3	N/A	February 2025	Added the words "Internal Exposure:" to front of the Article 313.1.b excerpted text to align the RPP with the RCM in RPP 204.	2203-PIR-0163, Rev. 3, (67)
3	N/A	February 2025	Changed the reference in Article 313.1.a excerpt to "835.1002(a)" to "835.1001(a)" to align the RPP with 10 CFR 835 and the RCM in RPP 209.	2203-PIR-0163, Rev. 3, (68) and CPCC-CR-2025-0341.
3	N/A	February 2025	Changed the reference in Article 213.4.a and 213.4.c excerpts from "DOE-RL-manager" to "DOE-HFO-manager" to align with the current DOE organization merger of DOE-RL and DOE-ORP to form DOE-HFO in RPP 233 and 237.	2203-PIR-0163, Rev. 3, (69) and CPCC-CR-2025-0700
3	N/A	February 2025	Changed reference to "Appendix A" to "Appendix 2A" to align the RPP with the RCM in RPP 242.	2203-PIR-0163, Rev. 3, (70)
3	N/A	February 2025	Changed Sections from "Appendix C,AC" to "Appendix C" to correct the 10 CFR 835 reference in RPP 260, 261 and 262.	2203-PIR-0163, Rev. 3, (71)
3	N/A	February 2025	Changed wording from "as modified by exemption (see Chapter 1)" to "as modified by exemptions (see Chapter 10 of this RPP)" to correct the RPP chapter reference in RPP 270.	2203-PIR-0163, Rev. 3, (72)
3	N/A	February 2025	Added the word "below" following "footnote 6" in the restatement of the requirement to align the text of the RPP with 10 CFR 835 in RPP 271.	2203-PIR-0163, Rev. 3, (73)
3	N/A	February 2025	Added reference to "CPCC-00175" in front of "Appendix 4A" to clarify where the Appendix reference is located in RPP 278,	2203-PIR-0163, Rev. 3, (74)

			279, 280, 281, 282 and 283.	
3	N/A	February 2025	Changed the words "special tritium compounds" to "STC" to correct the restatement to align with 10 CFR 835 in RPP 282.	2203-PIR-0163, Rev. 3, (75)
3	N/A	February 2025	Changed TED Acronym from "total equivalent dose" to "total effective dose" in Acronym table following requirements matrix tables.	2203-PIR-0163, Rev. 3, (76)
3	N/A	February 2025	Move references following the requirements matrix tables to Section 14 of this RPP.	2203-PIR-0163, Rev. 3, (77)
3	N/A	May 2025	Changed the Policy and Commitment Basis reference from Article 522.1 to Article 522.2 in RPP 89.	2409-PIR-0176, Rev. 0, (31)
3	N/A	May 2025	Incorporate Authorized Limits Exemption for Alternate I-129 Contamination Limits into the RPP	2409-PIR-0176, Rev 0 (51)
3	N/A	May 2025	Changed all references of DOE/RL-2002-12, Hanford Radiological Health and Safety Document to DOE-HRD-SH-51953, Hanford Radiological Health and Safety within the RPP.	2409-PIR-0176, Rev 1 (3)
3	N/A	August 2025	Corrected the typo in the 7th bullet item in Chapter 2, Section 2.2.2, Included Activities by removing the words "and includes"	2203-PIR-0163, Rev. 4, (109)
3	N/A	August 2025	Added the following text to the 3rd bullet of Chapter 13, Requirements Matrix Discussion: “and ALARA Management Plan, CPCC-MP-RP-55025”.	2203-PIR-0163, Rev. 4, (110)
3	N/A	August 2025	Changed the sentence in the 4th bullet in Chapter 13, Requirements Matrix Discussion to read: "Compliance status relative to the current revision of 10 CFR 835 as of the date of submittal for approval of the RPP. (i.e., Compliant: 10 CFR 835)." and removed the year "[2007]" from the 5th bullet.	2203-PIR-0163, Rev. 4, (111)
3	N/A	August 2025	Added the words "unless otherwise noted" at the end of the note in the beginning of Appendix A.	2203-PIR-0163, Rev. 4, (112)
3	N/A	August 2025	Moved the reference to "Appenedix E" in Requirement #5, definition for Accountable Sealed Radioactive Source to before “10 CFR 835.”	2203-PIR-0163, Rev. 4, (113)
3	N/A	August 2025	Removed the "(1)" and "(2)" from Article 113.1 excerpt in RPP 8.	2203-PIR-0163, Rev. 4, (114)

3	N/A	August 2025	Removed reference to "CPCC-00175" in the excerpt from CPCC-00175, Table 2-1, Note 4, in RPP 53.	2203-PIR-0163, Rev. 4, (115)
3	N/A	August 2025	Added 10 CFR 835 references following the "shall" statements in the Policy and Commitment Basis of RPP 55 and 56.	2203-PIR-0163, Rev. 4, (116)
3	N/A	August 2025	Changed (editorial) excerpted text from Articles 231.9 and 236.3 in RPP 128 and 129.	2203-PIR-0163, Rev. 4, (117)
3	N/A	August 2025	Corrected the 10 CFR 835 reference to "835.702(c)(3)" in the excerpt from Article 722.4 in RPP 150 and 151	2203-PIR-0163, Rev. 4, (118)
3	N/A	August 2025	Added the word “and” at the end of the 7th bulleted item in the excerpt of Article 724.3 in RPP 169.	2203-PIR-0163, Rev. 4, (119)
3	N/A	August 2025	Changed "radiation protection program" to "RPP" in the excerpt from Article 743 and Article 613.1.d in RPP 171 and 194, respectively.	2203-PIR-0163, Rev. 4, (120)
3	N/A	August 2025	Changed reference to DAC values “6E-06 µCi/mL (2E+04 Bq/m^3)” to “1E-6 µCi/mL (7E-04 Bq/m^3) in RPP 263, Restatement of the Requirement.	2203-PIR-0163, Rev. 4, (121)
3	N/A	August 2025	Moved the note to the bottom of the block and revised it to align with the RCM in RPP 40.	2203-PIR-0163, Rev. 4, (135)
3	N/A	August 2025	Remove the second “shall” from the Policy and Commitment Basis, Article 215.5.b excerpt in RP 58.	2203-PIR-0163, Rev. 4, (136)

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Contents

Appendix

Tables

Terms

CPCCo	Central Plateau Cleanup Company DOE U.S. Department of Energy
DOE-HFO	U.S. Department of Energy, Hanford Field Office
DOE-ORP	U.S. Department of Energy, Office of River Protection
DOE-RL	U.S. Department of Energy, Richland Operations Office
HMIS	Hanford Mission Integration Solutions
HRD	*Hanford Radiological Health and Safety*, DOE-HRD-SH-51953
IBC	Integrated Biological Control
NRC	U.S. Nuclear Regulatory Commission
RCM	Radiological Control Manual
RPP	Radiation Protection Program

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1 Summary

This document represents a revision to the Central Plateau Cleanup Company (CPCCo) Radiation Protection Program (RPP*)*. The CPCCo RPP has been developed and revised to ensure compliance with the requirements of 10 CFR 835, "Occupational Radiation Protection".

This document provides full implementation of amended 10 CFR 835 requirements, as published on June 8, 2007, in the *Federal Register*, Vol. 72, 31904-31941 and the correcting amendments. The June 2007 amended rule became effective on July 9, 2007, and required full implementation no later than July 9, 2010. An exemption to the rule was implemented in the initial issue of the CPCCo RPP that approved alternate radionuclide values as listed in Tables 1-1 and 1-2. Another exemption to the rule for Iodine-129 alternate surface contamination values is implemented in this revision in Table 1-1.

Table 1-1. Authorized Limits Approved for Use by CPCCo as Residual Surface Contamination Values for Select Hard-to-Detect Radionuclides in 10 CFR 835, Appendix D

Radionuclide	Removable (dpm/100 cm^2)	Total (Fixed + Removable) (dpm/100 cm^2)
C-14, Fe-55, Ni-59, Ni-63, Se-79, Tc-99, Pd-107, Eu-155, I-129	10,000	50,000
Pu-241	1,000	5,000

dpm = disintegrations per minute

Table 1-2. Authorized Limits Approved for Use by CPCCo for Offsite Shipment and Regeneration of 200-ZP-1 and 200-PW-1 Operable Unit Pump and Treat Operations

Radionuclide	Authorized Limit (pCi/g)
Am-241	29
C-14	3,000
Co-60	21
Cs-137	80
Eu-152	40
Eu-154	40
Eu-155	700
H-3	300,000
I-129	50
Ni-63*	100
Np-237	50
Pa-231	10
Pu-238	26

Table 1-2. Authorized Limits Approved for Use by CPCCo for Offsite Shipment and Regeneration of 200-ZP-1 and 200-PW-1 Operable Unit Pump and Treat Operations

Radionuclide	Authorized Limit (pCi/g)
Pu-239	24
Pu-240	24
Se-79	2,000
Sr-90	100
Tc-99	500
Th-232 + progeny	6
U-234	100
U-235	100
U-238 + short-lived progeny	100

*The initially approved authorized limits indicated that if additional nuclide contaminants of concern are needed beyond those included in the authorized limit table, an authorized limit can be conservatively determined by using the value based on the worst-case nuclide of that type of emanation; for alpha emitters this would be Am-241, for beta emitters Sr-90, and for gamma emitters Co-60. Therefore, the approved Ni-63 value is that of Sr-90.

This RPP also provides an exception for Hanford Mission Integration Solutions (HMIS) integrated biological control (IBC) work activities performed in non-radiological areas at CPCCo-managed facilities from following CPCCo's RPP.

Appendix A of this RPP provides a requirements matrix identifying CPCCo commitments to the 10 CFR 835 requirements.

2 General Information

2.1 Purpose

This document meets the requirements for a Radiation Protection Program (RPP) as specified in the U.S. Department of Energy (DOE) final rule for 10 CFR 835, "Occupational Radiation Protection."

2.2 Scope

2.2.1 Contractual Relationship

CPCCo is responsible for actions required of CPCCo Contract, as defined in DOE Contract No. 89303320DEM000030, *Central Plateau Cleanup Contract*. The responsibilities include planning, managing, executing, and integrating a full range of programs and project activities included Central Plateau Cleanup Contract at the Hanford Site.

CPCCo performs or subcontracts the activities identified under Contract No. 89303320DEM000030. CPCCo retains subcontractors with special technologies and capabilities on a managed-task basis. CPCCo also uses subcontractors and service providers to supply dosimetry, instrumentation, training, laundry services, IBC, and health services as part of its site services contracts. In the case of dosimetry, dosimeters, dosimetry records, and certain instrumentation calibrations service is currently supplied by the Radiological Site Services provider and are performed in accordance with an approved statement of work and the service provider's DOE-approved RPP. The statement of work will identify CPCCo requirements that are applicable to the service being provided. Records associated with the site services provider's supplied services shall be maintained in accordance with the service provider's DOE-approved RPP.

Except as noted above, CPCCo subcontractors and service providers are required to comply with the requirements of this RPP. Although many of the 10 CFR 835 requirements are implemented either in whole or in part through subcontractors and service providers, CPCCo retains responsibility to comply with the requirements of 10 CFR 835 that fall within the scope of the CPCCo RPP.

With the exception of HMIS IBC work activities (e.g., noxious weed control, pest control, and tumbleweed cleanup) performed under Contract No. 89303320DEM000030, Section J, Attachment J-3, *Hanford Site Services and Interface Requirements Matrix,* at CPCCo-managed facilities and other work activities that are included in other DOE contractor's scope of work, this RPP will also be applicable to radiological work activities performed by other DOE contractors at CPCCo-managed facilities or projects, or otherwise performed under formal agreement to follow the CPCCo RPP, unless specific written direction is provided by DOE to require conduct of such work under a different contractor's RPP or U.S. Nuclear Regulatory Commission (NRC) license. HMIS IBC work activities performed under the HMIS RPP at CPCCo-managed facilities or projects will be limited to areas that are not controlled as radiological areas, as defined in 10 CFR 835.

2.2.2 Included Activities

The scope of applicability for this plan and the integrated RPP includes all radiological work activities carried out in accordance with Contract No. 89303320DEM000030 on behalf of DOE by CPCCo and/or its subcontractors and suppliers unless previously excepted. The CPCCo Contract scope of work requires CPCCo to plan, execute, and integrate this contract scope at the Hanford Site.

Except as allowed by 10 CFR 835.101(h), "Radiation Protection Programs," CPCCo will not initiate any task outside the scope of the RPP until DOE approves an update to the RPP or revision to the contract that incorporates this scope change.

CPCCo is responsible for managing and performing deactivation, decontamination, decommissioning, and demolition; non-tank farm waste disposal; groundwater monitoring and remediation; facility and waste site characterization; surveillance and maintenance; and field remediation activities as defined by the CPCCo scope of work (Central Plateau Cleanup Contract, Section C). The scope of work includes, but is not limited to, the following:

- Conduct program activities
- Provide program and management support and reporting activities
- Perform deactivation, decontamination, decommissioning, and demolition activities; and waste site remediation
- Perform soil and groundwater remediation
- Perform waste retrieval, treatment, storage, and disposal
- Prepare *Resource Conservation and Recovery Act of 1976* and *Comprehensive Environmental Response, Compensation, and Liability Act of 1980* decision documents
- Perform safe and compliant base operations including, but not limited to, the following:
  - Maintain nuclear and non-nuclear operational and surplus facilities and inactive waste sites (including pipelines) for the remaining River Corridor and Central Plateau work scopes
  - Manage remaining River Corridor work scopes
    - 100-K and 300 Areas
  - Manage remaining Central Plateau work scopes
    - B Plant, T Plant, and U Plant, Plutonium-Uranium Extraction Plant, and Reduction-Oxidation Plant
    - Waste sites (including pipelines), as described in Contract No. 89303320DEM000030, Section J, Attachments J-12 and J-13
  - Conduct surveillance and maintenance activities
  - Operate groundwater treatment facilities
  - Provide general operations for solid waste treatment, storage, and disposal services
  - Provide risk mitigation evaluations
- Perform B Reactor activities associated with providing safe, controlled public access in a variety of forms: surveillance, maintenance, cleanup, and hazard reduction at the assigned properties; improvements and historic preservation work including construction projects; and developing a regulatory compliance framework for long-term operations

- Maintain documented safety analysis, technical safety requirements, fire hazards analysis, and emergency planning hazards assessment documents
- Maintain environmental permits and provide input to any other site-specific permits
- Perform Environmental Restoration Disposal Facility management activities

2.2.3 Excluded Activities

Specific applicable exclusions include those listed in 10 CFR 835.1(b). Except as discussed in 10 CFR 835.1(c), "Scope," specific applicability exclusions include the following:

- Activities that are regulated through a license by the NRC or a state under an agreement with the NRC, including activities certified by the NRC under Section 1701 of the *Atomic Energy Act of 1954*
- Activities conducted under the authority of the Deputy Administrator for Naval Reactors, as described in Executive Order 12344, *Naval Nuclear Propulsion Program*
- Activities conducted under the Nuclear Explosives and Weapons Surety Program relating to the prevention of accidental or unauthorized nuclear detonations
- DOE activities conducted outside of the United States on territory under the jurisdiction of a foreign government to the extent governed by occupational radiation protection requirements agreed to between the United States and the cognizant government
- Background radiation, radiation doses received as a patient for the purposes of medical diagnosis or therapy, or radiation doses received from participation as a subject in medical research programs
- Radioactive material on or within material, equipment, and real property that is approved for release when the radiological conditions of the material, equipment, and real property have been documented to comply with the criteria for release set forth in a DOE-authorized limit that has been approved by a Secretarial Officer in consultation with the Chief Health, Safety, and Security Officer
- Radioactive material transportation not performed by DOE or a DOE contractor

Facilities managed and operated by other Hanford Site contractors are excluded from the scope of this RPP.

2.3 Submittal Format and Content

The CPCCo RPP is based on the regulatory requirements of 10 CFR 835 and is formatted, in part, to the guidance contained in DOE RPP guide, DOE G 441.1-1C, *Radiation Protection Programs Guide for Use with Title 10, Code of Federal Regulations, Part 835, Occupational Radiation Protection*, Chapter 3.0, Appendix 3.A (most recent revision).

Appendix A of this RPP provides a requirements matrix identifying CPCCo's commitments to 10 CFR 835 requirements. These commitments became effective July 26, 2021.

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3 Applicability of Rule Requirements

The Central Plateau Cleanup Contract defines the scope of applicability for the RPP and CPCC-00175, *CPCCo Radiological Control Manual* (RCM), to include any existing and/or anticipated operational tasks carried out in accordance with Contract No. 89303320DEM000030, on behalf of DOE by CPCCo and/or its subcontractors and suppliers that have the potential to result in:

- Occupational dose to minors and general employees due to exposure to radiation and/or radioactive material from a DOE activity (as defined in §835.2)
- Dose to members of the public due to exposure to radiation and/or radioactive material during access to a (radiologically) controlled area (as defined in §835.2)
- Planned special exposures (as described in §835.204)
- Emergency exposures (as described in §835.1302)
- Dose to the embryo/fetus of a declared pregnant worker due to occupational exposure to a declared pregnant worker (as defined in §835.2)

Chapter 6 of this RPP identifies sections of 10 CFR 835 where the graded approach and terminology clarifications will be applied.

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4 Safety and Implementation Guides and Technical Standards

CPCCo did not use any entire guides or technical standards to document compliance. Selected portions of guides and technical standards were used in the development of the CPCCo Radiological Control Manual (RCM) (CPCC-00175) and implementing procedures. When adopted as a means for meeting 10 CFR 835 requirements, the guide or standard is identified in the policy and commitment basis.

The Hanford Radiological Health and Safety document (DOE-HRD-SH-51953, *Hanford Radiological Health and Safety* [HRD]) identifies supplemental radiological safety requirements that maintain consistency for the Hanford Site, optimizes site radiological control programs to provide an overall benefit to the government, and supports DOE in the management of long-term risks relative to radiological health and safety. The HRD requirements are provided within CPCC-00175 and implementing procedures.

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5 Baseline

The baseline assessment of 10 CFR 835 compliance is included in the RPP requirements matrix (Appendix A of this document). The following compliance definition is used in the Appendix A matrix:

- **Compliant:** 10 CFR 835 indicates the 10 CFR 835 (July 2007) requirement is documented as a commitment in policy and implementing procedures, and the relevant documents are implemented through actual practice at working levels that can be verified by inspection.
- **Compliant:** 10 CFR 835* indicates the 10 CFR 835 (July 2007) requirement and exemption for specific hard-to-detect radionuclides from Appendix D, "Surface Contamination Values," authorized by the DOE Richland Operations Office (DOE-RL) in Letter 21-ESQ-001169 ("US Department of Energy, Richland Operations Office Approval to Remove Central Plateau Cleanup Company LLC, U.S. Department of Energy Order 458.1 Authorized Limits Applicable to the 100 Area Pump-And-Treat Facility from the List of Approved Authorized Limits") and DOE Letter 23-SHD-001477 from Kelly Brazil to John Eschenberg of Central Plateau Cleanup Company, LLC. authorizing limits for I-129 for CPCCo, was documented as a commitment in policy and implementing procedures. The relevant documents are implemented through actual practice at working levels that can be verified by inspection.

Appendix A of this RPP provides a requirements matrix identifying CPCCo commitments to 10 CFR 835 requirements. These commitments became effective July 26, 2021.

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6 Graded Approach

The requirements of 10 CFR 835 consist primarily of highly prescriptive worker safety requirements that constitute a comprehensive safety envelope for the conduct of radiological work activities. These very specific requirements are not subject to a graded approach. However, the rule also contains a small number of requirements that are either "performance-based" (i.e., specify an end result without prescribing what is necessary to achieve it) or require clarification to clearly establish the intent and scope of the requirement.

Upon evaluation, several of these requirements were determined to be subject to a graded approach. For the purposes of this RPP, a graded approach is achieved through the inclusion of narrative text that describes those CPCCo commitments considered appropriate to meet performance-based requirements. These additions are incorporated, where appropriate, into the 10 CFR 835 requirements matrix for CPCCo (Appendix A of this document).

Those requirements determined to be suitable for a graded approach through a performance-based approach (Table 6-1) or using terminology clarifications (Table 6-2) are listed in the following tables.

6.1 Graded Approach (14 Total Requirements)

Table 6-1 contains nonprescriptive, performance-based requirements that are subject to a graded approach through the incorporation of additional provisions including narrative text, references to controlling technical bases and program documents, or other technical standards deemed sufficient to establish the commitment bases mandated by the requirements. The requirements matrix (Appendix A of this document) identifies these provisions. The graded approach is based on considerations of the magnitude of the hazard, the complexity of the situation, and the length of time the situation will exist.

Table 6-1. Requirements Subject to a Graded Approach

Requirement No.	10 CFR 835 Section	Discussion
29	102	CPCCo will apply the graded approach by identifying the functional elements to be assessed within the implementing procedure or assessment plan.
30	103	CPCCo will apply the graded approach in the identification of individuals responsible for developing and implementing measures necessary for ensuring compliance.
31	104	CPCCo will apply the graded approach process described in DOE G 441.1-1C, Section 3.2.0, toward the implementation CPCCo Radiation Protection Program procedures for this functional area.
64	401(a)(1)	The requirements of §835.401 are subject to the graded approach through criteria established by CPCCo monitoring program. The program establishes administrative records for tracking and trending radiological conditions based on routine tasks (radiological survey reports). Task descriptions and work documents specify the frequency of radiological surveys. Workplace air sampling program defines criteria for use of continuous air monitors.
190–196	901(c)	CPCCo will apply the graded approach process described in DOE G 441.1-1C, Section 14.2 toward the implementation of CPCCO Radiation Protection Program procedures and training for this functional area. Note the application of §835.901(c) graded approach applies to RPP #190–#196.

Table 6-1. Requirements Subject to a Graded Approach

Requirement No.	10 CFR 835 Section	Discussion
199–200	901(e)	CPCCo will apply the graded approach described in DOE G 441.1-1C, Section 14.7 toward the implementation of this requirement. Note the application of §835.901(e) graded approach applies to RPP #199 and #200.
219	1102(a)	Establishment of appropriate controls to prevent inadvertent transfer of removable radioactive contamination to locations outside radiological areas under normal operating conditions is subject to a graded approach that balances the relevant factors such as environmental and biological vectors. CPCCo will maintain a contamination control program to monitor and control radioactive contamination.*

References:

10 CFR 835, "Occupational Radiation Protection."

DOE G 441.1-1C, Chg 1, *Radiation Protection Programs Guide for Use with Title 10, Code of Federal Regulations, Part 835, Occupational Radiation Protection.*

*Letter, J.D. Wagoner, RL, to Dr. A. L. Trego, WHC, "Request for Exemption of Doe Nuclear Safety Rule 10 CFR 835.404(b)," dated August 23, 1995. (Note: Referenced in HNF-SP-1145, Rev. 2D and maintained for historical reference. The 1998 amended rule moved the requirement from 10 CFR 835.404(b) to 10 CFR 835.1102(b), "Control of Areas.")

6.2 Terminology Clarifications (20 Total Requirements)

Table 6-2 identifies those requirements determined to be suitable for a graded approach through the incorporation of terminology clarifications. The requirements matrix (Appendix A of this document) provides these clarifications as an integral part of establishing CPCCo commitment basis.

Table 6-2. Requirements Subject to Terminology Clarifications

Requirement No.	10 CFR 835 Section	Terminology Clarification
16	101(c)	"Commensurate with the nature of the activities performed" is the nature of those activities, described in Section 2.2 of this document, that are performed by CPCCo, its subcontractors, and suppliers at CPCCo-managed facilities and activities as specified in Contract No. 89303320DEM000030.
26	101(h)	CPCCo will apply the guidelines of DOE G 441.1-1C, Section 3.1 when making the determination of "changes that decrease the effectiveness of the RPP."
58	206(b)	CPCCo will apply the guideline of DOE G 441.1-1C, Section 8.3 to determine "substantial variation" unless a separate technical basis is prepared and approved for the activity.
74–79	402(a)(1) to (4)	"Are likely to receive" recognizes that professional judgment and experience will be used in making decisions in specific circumstances. (DOE G 441.1-1-C, Section 3.1)
84–87	402(c)(1) to (4)	Workers who "are likely to receive" recognize that professional judgment and experience will be used in making decisions in specific circumstances (DOE G 441.1-1C, Section 3.1).

Table 6-2. Requirements Subject to Terminology Clarifications

Requirement No.	10 CFR 835 Section	Terminology Clarification
91	403(a)(1)	"An individual is likely to receive" recognizes that professional judgment and experience will be used in making decisions in specific circumstances (DOE G 441.1-1C, Section 3.1).
100	405(d)	A "working day" is considered the interval of time within each 24-hour period during which the building or area is routinely occupied or available for operations other than emergency activities.
102	501(a)	CPCCo considers entry control to include posting, barricades, control devices on entryways, visual and audible alarms, administrative procedures, locked entryways, access control systems, and training. The CPCCo entry control programs are used to the degree commensurate with existing and potential radiological hazards within the area.
161	702(e)	"Reasonable efforts shall be made," means that "efforts should include at least three written requests to each prior employer" in accordance with guidance from DOE G 441.1-1C, Section 13.2.0.3.
170	704(b)	"Actions taken to maintain..." means the elements of an occupational ALARA Program, as recommended in the DOE Radiation Protection Programs guide (DOE G 441.1-1C, Section 4.2.0).
182	801(e)	"Departmental requirements" means DOE O 232.2A, *Occurrence Reporting and Processing of Operations Information.*
239	1302(a)	"Risk...shall be minimized" means, if alternative actions are available to meet emergency needs, then adopting the action with the lowest assessed risk of significant personnel injury shall take precedence over property loss considerations.

References:

10 CFR 835, "Occupational Radiation Protection."

DOE G 441.1-1C, Chg 1, *Radiation Protection Programs Guide for Use with Title 10, Code of Federal Regulations, Part 835, Occupational Radiation Protection*.

DOE O 232.2A, *Occurrence Reporting and Processing of Operations Information*.

ALARA = as low as reasonably achievable

CPCCo = Central Plateau Cleanup Company

= Radiation Protection Program

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7 Resource Assessment

No resource assessment is required.

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8 Prioritization

No prioritization is required.

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9 Milestones and Schedules

Appendix A of this RPP provides a requirements matrix identifying CPCCo commitments to 10 CFR 835 requirements. These commitments became effective July 26, 2021.

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10 Exemptions

CPCCo received approval from DOE Headquarters and DOE-RL on February 1, 2021, for an exemption from 10 CFR 835, Appendix D, "Surface Contamination Values," that allows plutonium-241 to be controlled as a beta-gamma emitter (see Table 1-1 in Chapter 1).

CPCCo received approval from DOE Headquarters and DOE-RL on April 9, 2021, for an exemption from 10 CFR 835, Appendix D for specific hard-to-detect beta-gamma emitting radionuclides (carbon-14, iron-55, nickel-59, nickel-63, selenium-79, technetium-99, palladium-107, and europium-155). Alternative surface contamination values were approved for these nuclides (see Table 1-2 in Chapter 1). Another Authorized Limit was granted to CPCCo for Iodine-129 Surface Contamination Limits on April 20, 2023 in DOE Letter 23-SHD-001477 from Kelly Brazil to John Eschenberg of Central Plateau Cleanup Company, LLC (see Table 1-1 in Chapter 1).

Implementation of these alternative surface contamination values was subject to two conditions with a third condition added for I-129 exemption only:

- CPCCo shall use the surface contamination values shown in the following table in place of those in 10 CFR 835, Appendix D and in all provisions and definitions of 10 CFR 835 where Appendix D is cited.
- CPCCo updates its RPP to reflect the revised surface contamination values shown in the following table, including the definition of transuranics.
- CPCCo shall include a review of the technical basis for I-129 exemption as part of the triennial 10 CFR 835 assessments and contact the DOE cognizant field element in writing with anything affecting the validity of the exemption during the review.

As modified to incorporate the exemptions, Appendix D to 10 CFR 835 reads as follows:

The data presented in Appendix D are to be used in identifying the need for posting of contamination and high contamination areas in accordance with §835.603(e) and (f) and identifying the need for surface contamination monitoring and control in accordance with §835.1101 and §835.1102.

Surface Contamination Values[1] in dpm/100 cm²		
Radionuclide	***Removable[2,4]***	***Total (Fixed + Removable)[2,3]***
U-nat, U-235, U-238, and associated decay products	*[7] 1,000*	*[7] 5,000*
Transuranics,[8] Ra-226, Ra-228, Th-230, Th-228, Pa-231, Ac-227, I-125	*20*	*500*
Th-nat, Th-232, Sr-90, Ra-223, Ra-224, U-232, I-126, I-131, I-133	*200*	*1,000*
Beta-gamma emitters (nuclides with decay modes other than alpha emission or spontaneous fission) except Sr-90 and others noted above and below[5].	*1,000*	*5,000*
Tritium and Special Tritium Compounds (STCs) [6]	*10,000*	*See Footnote 6*
C-14, Fe-55, Ni-59, Ni-63, Se-79, Tc-99, Pd-107, Eu-155, I-129	*10,000*	*50,000*

[1] The values in this appendix, with the exception noted in footnote 6, apply to radioactive contamination deposited on, but not incorporated into the interior or matrix, of the contaminated item. Where surface contamination by both alpha-and beta-gamma-emitting nuclides exists, the limits established for alpha- and beta-gamma-emitting nuclides apply independently.

Surface Contamination Values[1] in dpm/100 cm²		
Radionuclide	***Removable[2,4]***	***Total (Fixed + Removable)[2,3]***
[2] As used in this table, dpm (disintegrations per minute) means the rate of emission by radioactive material as determined by correcting the counts per minute observed by an appropriate detector for background, efficiency, and geometric factors associated with the instrumentation.		
[3] The levels may be averaged over one square meter provided the maximum surface activity in any area of 100 cm² is less than three times the value specified. For purposes of averaging, any square meter of surface shall be considered to be above the surface contamination limit if: (1) From measurements of a representative number of sections it is determined that the average contamination level exceeds the applicable value; or (2) it is determined that the sum of the activity of all isolated spots or particles in any 100 cm² area exceeds three times the applicable value.		
[4] The amount of removable radioactive material per 100 cm² of surface area should be determined by swiping the area with dry filter or soft absorbent paper, applying moderate pressure, and then assessing the amount of radioactive material on the swipe with an appropriate instrument of known efficiency. (Note – The use of dry material may not be appropriate for tritium.) When removable contamination on objects of surface area less than 100 cm² is determined, the activity per unit area shall be based on the actual area and the entire surface shall be wiped. It is not necessary to use swiping techniques to measure removable contamination levels if the direct scan surveys indicate that the total residual contamination levels are within the limits for removable contamination.		
[5] This category of radionuclides includes mixed fission products, including Sr-90, which is present in them. It does not apply to Sr-90, which has been separated from the other fission products or mixtures where the Sr-90 is enriched.		
[6] Tritium contamination may diffuse into the volume or matrix of materials. Evaluation of surface contamination shall consider the extent to which such contamination may migrate to the surface in order to ensure the surface contamination value provided in this appendix is not exceeded. Once this contamination migrates to the surface, it may be removable, not fixed; therefore, a "Total" value does not apply. In certain cases, a "Total" value of 10,000 dpm/100cm² may be applicable either to metals, of the types which form insoluble special tritium compounds that have been exposed to tritium; or to bulk materials to which insoluble special tritium compound are fixed to a surface.		
[7] These limits only apply to the alpha emitters within the respective decay series.		
[8] Transuranics, as used in this row, apply to transuranic radionuclides excluding Pu-241. Pu-241 shall be evaluated using the beta-gamma emitter limits.		

10.1 Requirements Impacted by the Exemptions from 10 CFR 835, Appendix D

Table 10-1 identifies the RPP requirements and corresponding 10 CFR 835 provisions impacted by the change in Appendix D values.

Table 10-1. Requirements Impacted by the Change in 10 CFR 835, Appendix D Values

Requirement No.	10 CFR 835 Section	Restatement of the Requirement
5	835.2(a)	As used in this part: Contamination area means any area, accessible to individuals, where removable surface contamination values exceed or are likely to exceed the removable surface contamination values specified in Appendix D of this part, but to not exceed 100 times those values.

Table 10-1. Requirements Impacted by the Change in 10 CFR 835, Appendix D Values

Requirement No.	10 CFR 835 Section	Restatement of the Requirement
5	835.2(a)	As used in this part: High contamination area means any area, accessible to individuals, where removable surface contamination levels exceed or are likely to exceed 100 times the removable surface contamination values specified in Appendix D of this part.
113	835.601(a)	Except as otherwise provided in this subpart, postings and labels required by this subpart shall include the standard radiation warning trefoil in black or magenta imposed upon a yellow background.
114	835.601(b)	Signs required by this subpart shall be clearly and conspicuously posted and may include radiological protection instructions.
115	835.601(c).1	The postings and labeling requirements in this subpart may be modified to reflect the special considerations of the U.S. Department of Energy activities conducted at private residences or businesses.
116	835.601(c).2	Such modifications shall provide the same level of protection to individuals as the existing provisions in this subpart.
125	835.603(e)	Each access point to radiological areas and radioactive materials areas (as defined in §835.2) shall be posted with conspicuous signs bearing the wording provided in this section. (e) Contamination Area. The words “Caution, Contamination Area” shall be posted at each contamination area.
126	835.603(f)	Each access point to radiological areas and radioactive materials areas (as defined in §835.2) shall be posted with conspicuous signs bearing the wording provided in this section. (f) High Contamination Area. The words “Caution, High Contamination Area” or “Danger, High Contamination Area” shall be posted at each high contamination area.
214	835.1101(a)(1)	Except as provided in paragraphs (b) and (c) of this section, material and equipment in contamination areas, high contamination areas, and airborne radioactivity areas shall not be released to a controlled area if: (1) Removable surface contamination levels on accessible surfaces exceed the removable surface contamination values specified in Appendix D of this part; or
215	835.1101(a)(2)	Except as provided in paragraphs (b) and (c) of this section, material and equipment in contamination areas, high contamination areas, and airborne radioactivity areas shall not be released to a controlled area if: (2) Prior use suggests that the removable contamination levels on inaccessible surfaces are likely to exceed the removable surface contamination values specified in Appendix D of this part.
216	835.1101(b)	Material and equipment exceeding the removable surface contamination values specified in Appendix D of this part may be conditionally released for movement on-site for immediate placement in another radiological area only if appropriate monitoring is performed and appropriate controls for the movement are established and exercised.

Table 10-1. Requirements Impacted by the Change in 10 CFR 835, Appendix D Values

Requirement No.	10 CFR 835 Section	Restatement of the Requirement
217	835.1101(c)(1)	Material and equipment with fixed contamination levels that exceed the total contamination values specified in Appendix D of this part may be released for use in controlled areas outside of radiological areas only under the following conditions: (1) Removable surface contamination levels are below the removable surface contamination values specified in Appendix D of this part; and
218	835.1101(c)(2)	Material and equipment with fixed contamination levels that exceed the total contamination values specified in Appendix D of this part may be released for use in controlled areas outside of radiological areas only under the following conditions: (2) The material or equipment is routinely monitored and clearly marked and labeled to alert personnel of the contaminated status.
220	835.1102(b)	Any area in which contamination levels exceed the values specified in Appendix D of this part shall be controlled in a manner commensurate with the physical and chemical characteristics of the contaminant, the radionuclide present, and the fixed and removable surface contamination values.
221	835.1102(c)	Areas accessible to individuals where the measured total surface contamination levels exceed, but the removable surface contamination levels are less than, corresponding surface contamination values specified in Appendix D of this part, shall be controlled as follows when located outside of radiological areas:
222	835.1102(c)(1)	The area shall be routinely monitored to ensure the removable surface contamination levels remain below the removable surface contamination values specified in Appendix D of this part; and
223	835.1102(c)(2)	The area shall be conspicuously marked to warn individuals of the contaminated status.
225	835.1102(e)	Protective clothing shall be required for entry to areas in which removable contamination exists at levels exceeding the removable surface contamination values specified in Appendix D of this part.
270	835 Appendix D, D.1	The data in Appendix D are to be used in identifying the need for posting of contamination and high contamination areas in accordance with §835.603(e) and (f) and identifying the need for surface contamination monitoring in accordance with §835.1101 and §835.1102.

Reference: 10 CFR 835, "Occupational Radiation Protection."

11 Compensatory Actions

Appendix A of this RPP provides a requirements matrix identifying CPCCo commitments to 10 CFR 835 requirements. These commitments became effective July 26, 2021.

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12 Tracking

No tracking is required.

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13 Requirements Matrix Discussion

Appendix A of this RPP provides a requirements matrix identifying CPCCo commitments to 10 CFR 835 requirements:

- The 10 CFR 835 section, noting the numerical order of the requirements.
- A restatement of the 10 CFR 835 requirement implemented by CPCCo.
- CPCCo policy and commitment basis, as implemented in the CPCCo RCM (CPCC-00175) and ALARA Management Plan, CPCC-MP-RP-55025, to ensure compliance.
- Compliance status relative to the current revision of 10 CFR 835 as of the date of submittal for approval of the RPP. (i.e., Compliant: 10 CFR 835).
- Compliance status relative to the respective revision of 10 CFR 835 (i.e., Compliant: 10 CFR 835 *). An asterisk (*) is used to denote compliance with the Exemption for specific hard-to-detect radionuclides from 10 CFR 835, Appendix D, authorized by DOE-RL in letter 09-SED-0060, "Contract No. DE-AC06-08RL14788 - Request for Exemption from Title 10, Code of Federal Regulations (CFR), Part 835, Occupational Radiation Protection, Appendix D, Surface Contamination Values" and DOE Letter 23-SHD-001477, "Contract No 89303320DEM000030 – U.S. Department of Energy, Approval to Implement Exemptions from 10 Code of Federal Regulations 835 Appendix D – Surface Contamination Values for Iodine-129".

The degree of detail provided for each requirement in the matrix is handled on a case-by-case basis. It should be noted that, in some instances, program/policy-level document references are either supplemented or replaced by narrative text. The combination of specific document references and narrative text contained in this matrix defines CPCCo commitment to DOE regarding the requirements of 10 CFR 835.

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14 References

09-SED-0060, 2009, "Contract No. DE-AC06-08RL14788 - Request for Exemption from Title 10, Code of Federal Regulations (CFR), Part 835, Occupational Radiation Protection, Appendix D, Surface Contamination Values," (letter to J.G. Lehew III, CH2M HILL Plateau Remediation Company, LLC, from David A. Brockman and Jenise C. Connerly), U.S. Department of Energy, Richland Operations Office, Richland, Washington, February 6.

10 CFR 71.4, "Packaging and Transportation of Radioactive Material," "Definitions," Code of Federal Regulations. Available at: https://www.ecfr.gov/current/title-10/chapter-I/part-71.

10 CFR 835, "Occupational Radiation Protection," *Code of Federal Regulations*. Available at: https://www.ecfr.gov/current/title-10/chapter-III/part-835.

49 CFR 172, "Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, Training Requirements, and Security Plans," *Code of Federal Regulations*. Available at: https://www.ecfr.gov/current/title-49/subtitle-B/chapter-I/subchapter- C/part-172.

21-ESQ-001169, 2021, "US Department of Energy, Richland Operations Office Approval to Remove Central Plateau Cleanup Company LLC, U.S. Department of Energy Order 458.1 Authorized Limits Applicable to the 100 Area Pump-And-Treat Facility from the List of Approved Authorized Limits," letter to S. Sax, Central Plateau Cleanup Company, from J.C. Connerly, U.S. Department of Energy, Richland Operations Office, dated April 9.

23-SHD-001477, 2023, "Contract No 89303320DEM000030 – U.S. Department of Energy, Approval to Implement Exemptions from 10 Code of Federal Regulations 835 Appendix D – Surface Contamination Values for Iodine-129". (Letter from Kelly Brazil to John Eschenberg of Central Plateau Cleanup Company, LLC) U.S. Department of Energy, Richland Operations Office, Richland, Washington, April 20.

Atomic Energy Act of 1954, Pub. L. 83-703, as amended, 42 USC 2011 et seq., 68 Stat. 919. Available at: https://www.govinfo.gov/content/pkg/STATUTE-68/pdf/STATUTE-68-Pg919.pdf#page=30.

Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 USC 9601, et seq., Pub. L. 107-377, December 31, 2002. Available at: https://www.csu.edu/cerc/researchreports/documents/CERCLASummary1980.pdf.

CPCC-00175, 2022, *Radiological Control Manual*, Central Plateau Cleanup Company, Richland, Washington.

DOE G 441.1-1C, Chg 1 (Admin Chg), 2011, *Radiation Protection Programs Guide for Use with Title 10, Code of Federal Regulations, Part 835, Occupational Radiation Protection*, U.S. Department of Energy, Washington, D.C. Available at: https://www.directives.doe.gov/directives-documents/400-series/0441.1-EGuide-01c-admchg1.

DOE O 232.2A, *Occurrence Reporting and Processing of Operations Information,* U.S. Department of Energy, Washington, D.C. Available at: https://www.directives.doe.gov/directives-documents/200-series/0232.2-BOrder-a-chg1-minchg/@@images/file

DOEHRD-SH-51953, 2024, *Hanford Radiological Health and Safety*, Rev. 0-0, U.S. Department of Energy, Richland Operations Office, Richland, Washington. Available at: *(Location Redacted)*

Executive Order 12344, 1982, *Naval Nuclear Propulsion Program*, Ronald W. Reagan, February 1. Available at: https://www.govinfo.gov/content/pkg/USCODE-2009-title50/html/USCODE-2009-title50-chap42-subchapI-sec2511.htm.

ICRP CD1, 1999, The ICRP Database of Dose Coefficients: Workers and Members of the Public, International Commission on Radiological Protection, Pergamon Press, Elmsford, New York.

ICRP Publication 23, 1974, *Report of the Task Group on Reference Man,* International Commission on Radiological Protection, Pergamon Press, Elmsford, New York. Available at: http://journals.sagepub.com/pb-assets/cmscontent/ANI/P_023_1975_Report_on_the_Task_Group_on_Reference_Man_rev0.pdf.

ICRP Publication 65, 1993, *Protection Against Radon-222 at Home and at Work*, International Commission on Radiological Protection, Pergamon Press, Elmsford, New York. Available at: http://journals.sagepub.com/doi/pdf/10.1177/ANIB_23_2.

ICRP Publication 68, 1994, *Dose Coefficients for Intakes of Radionuclides by Workers*, Replacement for ICRP Publication 61, International Commission on Radiological Protection, Pergamon Press, Elmsford, New York. Available at: http://journals.sagepub.com/doi/pdf/10.1177/ANIB_24_4.

Privacy Act of 1974, Pub. L. 93-579, as amended, 5 USC 552a, 88 Stat. 1896. Available at: https://www.govinfo.gov/content/pkg/USCODE-2018-title5/pdf/USCODE-2018-title5-partI- chap5-subchapII-sec552a.pdf.

HNF-SP-1145, 1998, *Fluor Hanford, Inc. Radiation Protection Plan*, Rev. 2, Fluor Hanford, Richland, Washington.

Resource Conservation and Recovery Act of 1976, Pub. L. 94-580, 42 USC 6901 et seq. Available at: https://www.gpo.gov/fdsys/pkg/STATUTE-90/pdf/STATUTE-90-Pg2795.pdf.

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Appendix A

Requirements Matrix

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A Requirements Matrix

Note that the attached matrix refers to the requirements from 10 CFR 835, “Occupational Radiation Protection,” and the policy and commitments bases from CPCC-00175, *Radiological Control Manual* unless otherwise noted.

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10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
Subpart A, "General Provisions"			
§835.1, "Scope"			
#1 §835.1(a)	***General.*** The rules in this part establish radiation protection standards, limits, and program requirements for protecting individuals from ionizing radiation resulting from the conduct of DOE activities.	DOE Administrative; not a requirement.	N/A
#2 §835.1(b)	***Exclusion.*** Except as provided in paragraph (c) of this section, the requirements in this part do not apply to: (1) Activities that are regulated through a license by the Nuclear Regulatory Commission or a state under an agreement with the Nuclear Regulatory Commission, including activities certified by the NRC under Section 1701 of the Atomic Energy Act; (2) Activities conducted under the authority of the Deputy Administrator for Naval Reactors, as described in Pub. L. 98-525 and 106.65; (3) Activities conducted under the Nuclear Explosives and Weapons Surety Program relating to the prevention of accidental or unauthorized nuclear detonations; (4) DOE activities conducted outside the United States on territory under the jurisdiction of a foreign government to the extent governed by occupational radiation protection requirements agreed to between the United States and the cognizant government; (5) Background radiation, radiation doses received as a patient for the purposes of medical diagnosis or therapy, or radiation doses received from participation as a subject in medical research programs; or (6) Radioactive material on or within material, equipment, and real property which is approved for release when the radiological conditions of the material, equipment, and real property have been documented to comply with the criteria for release set forth in a DOE-authorized limit that has been approved by a Secretarial Officer in consultation with the Director, Office of Environment, Health, Safety, and Security. (7) Radioactive material transportation not performed by DOE or a DOE contractor.	***Article 112.2*** **(excerpt and modified)** Except as discussed in Article 213.1, the requirements of this manual shall not apply to: a. Activities that are regulated through a license by the NRC or a state under an agreement with the NRC, including activities certified by the NRC under Section 1701 of the Atomic Energy Act; b. Activities conducted under the authority of the Deputy Administrator for Naval Reactors, as described in Pub. L. 98-525 and 106-65; c. Activities conducted under the Nuclear Explosives and Weapons Surety Program relating to the prevention of accidental or unauthorized nuclear detonations; d. DOE activities conducted outside the United States on territory under the jurisdiction of a foreign government to the extent governed by occupational radiation protection requirements agreed to between the United States and the cognizant government; e. Background radiation, radiation doses received as a patient for the purposes of medical diagnosis or therapy, or radiation doses received from participation as a subject in medical research programs; f. Radioactive material on or within material, equipment, and real property that is approved for release when the radiological conditions of the material, equipment, and real property have been documented to comply with the criteria for release set forth in a DOE-authorized limit that has been approved by a Secretarial Officer in consultation with the Director, Office of Environment, Health, Safety, and Security;	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
		g. Radioactive material transportation not performed by DOE or a DOE contractor.	
#3 §835.1(c)	Occupational doses received as a result of excluded activities and radioactive material transportation listed in paragraphs (b)(1) through (b)(4) and (b)(7) of this section shall be included to the extent practicable when determining compliance with the occupational dose limits at §835.202 and §835.207, and with the limits for the embryo/fetus at §835.206. Occupational doses resulting from authorized emergency exposures and planned special exposures shall not be considered when determining compliance with the dose limits at §835.202 and §835.207.	***Article 213.1*** **(excerpt and modified)** a. Occupational doses received as a result of excluded activities and radioactive material transportation, as listed in Article 112.2 (a-d and g) of this manual, shall [§835.1(c) and §835.202(b)] be included to the extent practicable when determining compliance with the occupational dose limits in Table 2-1 and Article 215. b. All occupational doses received during the current year, except doses resulting from planned special exposures conducted in compliance with Article 213.3 and emergency exposures authorized in accordance with Article 213.4, shall [§835.1(c) and §835.202(b)] be included when demonstrating compliance with Table 2-1, occupational dose limits for general employees and minors.	Compliant: 10 CFR 835
#4 §835.1(d)	The requirements in Subparts F and G of this part do not apply to radioactive material transportation by DOE or a DOE contractor conducted: (1) Under the continuous observation and control of an individual who is knowledgeable of and implements required exposure control measures, or (2) In accordance with Department of Transportation regulations or DOE orders that govern such movements.	***Article 423.13*** **(excerpt)** The requirements of 10 CFR 835, Subparts F and G (refer to RPP #102-#141) do not apply to radioactive material transportation by DOE or a DOE contractor conducted [§835.1(d)]: a. Under the continuous observation and control of an individual who is knowledgeable of and implements required exposure control measures, or b. In accordance with Department of Transportation regulations or DOE orders that govern such movements.	Compliant: 10 CFR 835
§835.2, "Definitions"			
#5 §835.2(a)	As used in this part: *Accountable sealed radioactive source* means a sealed radioactive source having a half-life ≥30 days and an isotopic activity equal to or greater than the corresponding value provided in Appendix E of this part.	As reflected in the CPCCo RCM Glossary: *Accountable sealed radioactive source* means a sealed radioactive source having a half-life ≥30 days and an isotopic activity equal to or greater than the corresponding value provided in Appendix E of 10 CFR 835, .	Compliant: 10 CFR 835
	Activity median aerodynamic diameter (AMAD) means a particle size in an aerosol where 50% of the activity in the aerosol is associated with particles of aerodynamic diameter greater than the AMAD.	*Activity median aerodynamic diameter (AMAD)* means a particle size in an aerosol where 50% of the activity in the aerosol is associated with particles of aerodynamic diameter greater than the AMAD.	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
	Airborne radioactive material or airborne radioactivity means radioactive material dispersed in the air in the form of dusts, fumes, particulates, mists, vapors, or gases.	*Airborne radioactive material or airborne radioactivity* means radioactive material dispersed in the air in the form of dusts, fumes, particulates, mists, vapors, or gases.	Compliant: 10 CFR 835
	Airborne radioactivity area means any area, accessible to individuals, where: (1) The concentration of airborne radioactivity, above natural background, exceeds or is likely to exceed the DAC values listed in Appendix A or Appendix C of this part; or (2) An individual present in the area without respiratory protection could receive an intake exceeding 12 DAC-hours in a week.	*Airborne radioactivity area* means any area, accessible to individuals, where: (1) The concentration of airborne radioactivity, above natural background, exceeds or is likely to exceed the DAC values listed in Appendix A or Appendix C of 10 CFR 835; or (2) An individual present in the area without respiratory protection could receive an intake exceeding 12 DAC-hours in a week.	Compliant: 10 CFR 835
	ALARA means "as low as is reasonably achievable," which is the approach to radiation protection to manage and control exposures (both individual and collective) to the work force and to the general public to as low as is reasonable, taking into account social, technical, economic, practical, and public policy considerations. As used in this part, ALARA is not a dose limit but a process that has the objective of attaining doses as far below the applicable limits of this part as is reasonably achievable.	*ALARA* means "as low as is reasonably achievable," which is the approach to radiation protection to manage and control exposures (both individual and collective) to the work force and to the general public to as low as is reasonable, taking into account social, technical, economic, practical, and public policy considerations. As used in 10 CFR 835, ALARA is not a dose limit but a process that has the objective of attaining doses as far below the applicable limits of 10 CFR 835 as is reasonably achievable.	Compliant: 10 CFR 835
	Annual limit on intake (ALI) means the derived limit for the amount of radioactive material taken into the body of an adult worker by inhalation or ingestion in a year. ALI is the smaller value of intake of a given radionuclide in a year by the reference man (ICRP Publication 23, *Report of the Task Group on Reference Man*) that would result in a committed effective dose of 5 rem (0.05 Sv) (1 rem = 0.01 Sv) or a committed equivalent dose of 50 rem (0.5 Sv) to any individual organ or tissue. ALI values for intake by ingestion and inhalation of selected radionuclides are based on ICRP Publication 68, *Dose Coefficients for Intakes of Radionuclides by Workers*.	*Annual limit on intake (ALI)* means the derived limit for the amount of radioactive material taken into the body of an adult worker by inhalation or ingestion in a year. ALI is the smaller value of intake of a given radionuclide in a year by the reference man (International Commission on Radiological Protection [ICRP] Publication 23, *Report of the Task Group on Reference Man*) that would result in a committed effective dose of 5 rem (0.05 Sv) (1 rem = 0.01 Sv) or a committed equivalent dose of 50 rem (0.5 Sv) to any individual organ or tissue. ALI values for intake by ingestion and inhalation of selected radionuclides are based on ICRP Publication 68, *Dose Coefficients for Intakes of Radionuclides by Workers*.	Compliant: 10 CFR 835
	Authorized limit means a limit on the concentration of residual radioactive material on the surfaces or within the property that has been derived consistent with DOE directives, including the ALARA process requirements, given the anticipated use of the property and has been authorized by DOE to permit the release of the property from DOE radiological control.	*Authorized limit* means a limit on the concentration of residual radioactive material on the surfaces or within the property that has been derived consistent with DOE directives, including the ALARA process requirements, given the anticipated use of the property and has been authorized by DOE to permit the release of the property from DOE radiological control.	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
	Background means radiation from: (1) Naturally occurring radioactive materials which have not been technologically enhanced; (2) Cosmic sources; (3) Global fallout as it exists in the environment (e.g., from the testing of nuclear explosive devices); (4) Radon and its progeny in concentrations or levels existing in buildings or the environment which have not been elevated as a result of current or prior activities; and (5) Consumer products containing nominal amounts of radioactive material or producing nominal amounts of radiation.	*Background* means radiation from: (1) Naturally occurring radioactive materials which have not been technologically enhanced; (2) Cosmic sources; (3) Global fallout as it exists in the environment (e.g., from the testing of nuclear explosive devices); (4) Radon and its progeny in concentrations or levels existing in buildings or the environment which have not been elevated as a result of current or prior activities; and (5) Consumer products containing nominal amounts of radioactive material or producing nominal amounts of radiation.	Compliant: 10 CFR 835
	Bioassay means the determination of kinds, quantities, or concentrations, and, in some cases, locations of radioactive material in the human body, whether by direct measurement or by analysis and evaluation of radioactive materials excreted or removed from the human body.	*Bioassay* means the determination of kinds, quantities, or concentrations, and, in some cases, locations of radioactive material in the human body, whether by direct measurement or by analysis and evaluation of radioactive materials excreted or removed from the human body.	Compliant: 10 CFR 835
	Calibration means to adjust and/or determine either: (1) The response or reading of an instrument relative to a standard (e.g., primary, secondary, or tertiary) or to a series of conventionally true values; or (2) The strength of a radiation source relative to a standard (e.g., primary, secondary, or tertiary) or conventionally true value.	*Calibration* means to adjust and/or determine either: (1) The response or reading of an instrument relative to a standard (e.g., primary, secondary, or tertiary) or to a series of conventionally true values; or (2) The strength of a radiation source relative to a standard (e.g., primary, secondary, or tertiary) or conventionally true value.	Compliant: 10 CFR 835
	Contamination area means any area, accessible to individuals, where removable surface contamination levels exceed or are likely to exceed the removable surface contamination values specified in Appendix D of this part but do not exceed 100 times those values.	*Contamination area* means any area, accessible to individuals, where removable surface contamination levels exceed or are likely to exceed the removable surface contamination values specified in Appendix D of 10 CFR 835 but do not exceed 100 times those values.	Compliant: 10 CFR 835*
	Controlled area means any area to which access is managed by or for DOE to protect individuals from exposure to radiation and/or radioactive material.	*Controlled area* means any area to which access is managed by or for DOE to protect individuals from exposure to radiation and/or radioactive material. Note: For the Hanford Site, a controlled area by this definition is called a radiologically controlled area to more precisely identify the reason for which control is established.	Compliant: 10 CFR 835
	Declared pregnant worker means a woman who has voluntarily declared to her employer, in writing, her pregnancy for the purpose	*Declared pregnant worker* means a woman who has voluntarily declared to her employer, in writing, her pregnancy for the	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
	of being subject to the occupational dose limits to the embryo/fetus as provided in §835.206. This declaration may be revoked, in writing, at any time by the declared pregnant worker.	purpose of being subject to the occupational dose limits to the embryo/fetus as provided in Article 215. This declaration may be revoked, in writing, at any time by the declared pregnant worker.	
	Derived air concentration (DAC) means, for the radionuclides listed in Appendix A of this part, the airborne concentration that equals the ALI divided by the volume of air breathed by an average worker for a working year of 2,000 hours (assuming a breathing volume of 2,400 m^3). For the radionuclides listed in Appendix C of this part, the air immersion DACs were calculated for a continuous, nonshielded exposure via immersion in a semi-infinite cloud of radioactive material. Except as noted in the footnotes to Appendix A of this part, the values are based on dose coefficients from ICRP Publication 68 and the associated ICRP CD1, *The ICRP Database of Dose Coefficients: Workers and Members of the Public.*	*Derived air concentration (DAC)* means, for the radionuclides listed in 10 CFR 835, Appendix A, the airborne concentration that equals the ALI divided by the volume of air breathed by an average worker for a working year of 2,000 hours (assuming a breathing volume of 2,400 m^3). For the radionuclides listed in 10 CFR 835, Appendix C, the air immersion DACs were calculated for a continuous, nonshielded exposure via immersion in a semi-infinite cloud of radioactive material. Except as noted in the footnotes to 10 CFR 835, Appendix A, the values are based on dose coefficients from ICRP Publication 68 and the associated ICRP CD1, *The ICRP Database of Dose Coefficients: Workers and Members of the Public*.	Compliant: 10 CFR 835
	Derived air concentration-hour (DAC-hour) means the product of the concentration of radioactive material in air (expressed as a fraction or multiple of the DAC for each radionuclide) and the time of exposure to that radionuclide in hours.	*Derived air concentration-hour (DAC-hour)* means the product of the concentration of radioactive material in air (expressed as a fraction or multiple of the DAC for each radionuclide) and the time of exposure to that radionuclide in hours.	Compliant: 10 CFR 835
	Deterministic effects means effects due to radiation exposure for which the severity varies with the dose and for which a threshold normally exists (e.g., radiation induced opacities within the lens of the eye).	*Deterministic effects* means effects due to radiation exposure for which the severity varies with the dose and for which a threshold normally exists (e.g., radiation induced opacities within the lens of the eye).	Compliant: 10 CFR 835
	DOE means the U.S. Department of Energy.	*DOE* means the U.S. Department of Energy.	Compliant: 10 CFR 835
	DOE activity means an activity taken for or by DOE in a DOE operation or facility that has the potential to result in the occupational exposure of an individual to radiation or radioactive material. The activity may be, but is not limited to, design, construction, operation, or decommissioning. To the extent appropriate, the activity may involve a single DOE facility or operation or a combination of facilities and operations, possibly including an entire site or multiple DOE sites.	*DOE activity* means an activity taken for or by the DOE in a DOE operation or facility that has the potential to result in the occupational exposure of an individual to radiation or radioactive material. The activity may be, but is not limited to, design, construction, operation, or decommissioning. To the extent appropriate, the activity may involve a single DOE facility or operation or a combination of facilities and operations, possibly including an entire site or multiple DOE sites.	Compliant: 10 CFR 835
	Entrance or access point means any location through which an individual could gain access to areas controlled for the purpose of radiation protection. This includes entry or exit portals of sufficient size to permit human entry, irrespective of their intended use.	*Entrance or access point* means any location through which an individual could gain access to areas controlled for the purpose of radiation protection. This includes entry or exit portals of	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
		sufficient size to permit human entry, irrespective of their intended use.	
	General employee means an individual who is either a DOE or DOE contractor employee, an employee of a subcontractor to a DOE contractor, or an individual who performs work for or in conjunction with DOE or uses DOE facilities.	*General employee* means an individual who is either a DOE or DOE contractor employee, an employee of a subcontractor to a DOE contractor, or an individual who performs work for or in conjunction with DOE or uses DOE facilities.	Compliant: 10 CFR 835
	High contamination area means any area, accessible to individuals, where removable surface contamination levels exceed or are likely to exceed 100 times the removable surface contamination values specified in Appendix D of this part.	*High contamination area* means any area, accessible to individuals, where removable surface contamination levels exceed or are likely to exceed 100 times the removable surface contamination values specified in Appendix D of 10 CFR 835.	Compliant: 10 CFR 835*
	High radiation area means any area, accessible to individuals, in which radiation levels could result in an individual receiving an equivalent dose to the whole body in excess of 0.1 rem (0.001 Sv) in 1 hour at 30 cm from the radiation source or from any surface that the radiation penetrates.	*High radiation area* means any area, accessible to individuals, in which radiation levels could result in an individual receiving an equivalent dose to the whole body in excess of 0.1 rem (0.001 Sv) in 1 hour at 30 cm from the radiation source or from any surface that the radiation penetrates.	Compliant: 10 CFR 835
	Individual means any human being.	*Individual* means any human being.	Compliant: 10 CFR 835
	Member of the public means an individual who is not a general employee. An individual is not a ‘‘member of the public’’ during any period in which the individual receives an occupational dose.	*Member of the public* means an individual who is not a general employee. An individual is not a “member of the public” during any period in which the individual receives an occupational dose.	Compliant: 10 CFR 835
	Minor means an individual less than 18 years of age.	*Minor* means an individual less than 18 years of age.	Compliant: 10 CFR 835
	Monitoring means the measurement of radiation levels, airborne radioactivity concentrations, radioactive contamination levels, quantities of radioactive material, or individual doses and the use of the results of these measurements to evaluate radiological hazards or potential and actual doses resulting from exposures to ionizing radiation.	*Monitoring* means the measurement of radiation levels, airborne radioactivity concentrations, radioactive contamination levels, quantities of radioactive material, or individual doses and the use of the results of these measurements to evaluate radiological hazards or potential and actual doses resulting from exposures to ionizing radiation.	Compliant: 10 CFR 835
	Occupational dose means an individual’s ionizing radiation dose (external and internal) as a result of that individual’s work assignment. Occupational dose does not include doses received as a medical patient or doses resulting from background radiation or participation as a subject in medical research programs.	*Occupational dose* means an individual’s ionizing radiation dose (external and internal) as a result of that individual’s work assignment. Occupational dose does not include doses received as a medical patient or doses resulting from background radiation or participation as a subject in medical research programs.	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
	Person means any individual, corporation, partnership, firm, association, trust, estate, public or private institution, group, government agency, any state or political subdivision of, or any political entity within a state, any foreign government or nation or other entity, and any legal successor, representative, agent, or agency of the foregoing; provided that person does not include DOE or the NRC.	*Person* means any individual, corporation, partnership, firm, association, trust, estate, public or private institution, group, government agency, any state or political subdivision of, or any political entity within a state, any foreign government or nation or other entity, and any legal successor, representative, agent, or agency of the foregoing; provided that person does not include DOE or the NRC.	Compliant: 10 CFR 835
	Radiation means ionizing radiation, which includes alpha particles, beta particles, gamma rays, X-rays, neutrons, high-speed electrons, high-speed protons, and other particles capable of producing ions. Radiation, as used in this part, does not include non-ionizing radiation such as radio waves or microwaves, or visible, infrared, or ultraviolet light.	*Radiation* means ionizing radiation, which includes alpha particles, beta particles, gamma rays, X-rays, neutrons, high-speed electrons, high-speed protons, and other particles capable of producing ions. Radiation, as used in 10 CFR 835, does not include non-ionizing radiation such as radio waves or microwaves, or visible, infrared, or ultraviolet light.	Compliant: 10 CFR 835
	Radiation area means any area, accessible to individuals, in which radiation levels could result in an individual receiving an equivalent dose to the whole body in excess of 0.005 rem (0.05 mSv) in 1 hour at 30 cm from the source or from any surface that the radiation penetrates.	*Radiation Area* means any area, accessible to individuals, in which radiation levels could result in an individual receiving an equivalent dose to the whole body in excess of 0.005 rem (0.05 mSv) in 1 hour at 30 cm from the source or from any surface that the radiation penetrates.	Compliant: 10 CFR 835
	Radioactive material area means any area within a controlled area, accessible to individuals, in which items or containers of radioactive material exist and the total activity of radioactive material exceeds the applicable values provided in Appendix E of this part.	*Radioactive material area* means any area within a controlled area, accessible to individuals, in which items or containers of radioactive material exist and the total activity of radioactive material exceeds the applicable values provided in Appendix E of 10 CFR 835.	Compliant: 10 CFR 835
	Radioactive material transportation means the movement of radioactive material by aircraft, rail, vessel, or highway vehicle. Radioactive material transportation does not include preparation of material or packagings for transportation, storage of material awaiting transportation, or application of markings and labels required for transportation.	*Radioactive material transportation* means the movement of radioactive material by aircraft, rail, vessel, or highway vehicle. Radioactive material transportation does not include preparation of material or packagings for transportation, storage of material awaiting transportation, or application of markings and labels required for transportation.	Compliant: 10 CFR 835
	Radiological area means any area within a controlled area defined in this section as a ‘‘radiation area,’’ ‘‘high radiation area,” ‘‘very high radiation area,’’ ‘‘contamination area,’’ ‘‘high contamination area,’’ or ‘‘airborne radioactivity area.’’	*Radiological area* means any area, within a controlled area, defined in 10 CFR 835 as a “radiation area,” “high radiation area,” “very high radiation area,” “contamination area,” “high contamination area,” or “airborne radioactivity area.”	Compliant: 10 CFR 835
	Radiological worker means a general employee whose job assignment involves operation of radiation producing devices or working with radioactive materials, or who is likely to be routinely occupationally exposed above 0.1 rem (0.001 Sv) per year TED.	*Radiological worker* means a general employee whose job assignment involves operation of radiation producing devices or working with radioactive materials, or who is likely to be	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
		routinely occupationally exposed above 0.1 rem (0.001 Sv) per year TED.	
	Real property means land and anything permanently affixed to the land such as buildings, fences, and those things attached to the buildings, such as light fixtures, plumbing and heating fixtures.	*Real property* means land and anything permanently affixed to the land such as buildings, fences, and those things attached to the buildings, such as light fixtures, plumbing and heating fixtures.	Compliant: 10 CFR 835
	Real-time air monitoring means measurement of the concentrations or quantities of airborne radioactive materials on a continuous basis.	*Real-time air monitoring* means measurement of the concentrations or quantities of airborne radioactive materials on a continuous basis.	Compliant: 10 CFR 835
	Respiratory protective device means an apparatus, such as a respirator, worn by an individual for the purpose of reducing the individual's intake of airborne radioactive materials.	*Respiratory protective device* means an apparatus, such as a respirator, worn by an individual for the purpose of reducing the individual's intake of airborne radioactive materials.	Compliant: 10 CFR 835
	Sealed radioactive source means a radioactive source manufactured, obtained, or retained for the purpose of utilizing the emitted radiation. The sealed radioactive source consists of a known or estimated quantity of radioactive material contained within a sealed capsule, sealed between layer(s) of nonradioactive material, or firmly fixed to a nonradioactive surface by electroplating or other means intended to prevent leakage or escape of the radioactive material. Sealed radioactive sources do not include reactor fuel elements, nuclear explosive devices, and radioisotope thermoelectric generators.	*Sealed radioactive source* means a radioactive source manufactured, obtained, or retained for the purpose of utilizing the emitted radiation. The sealed radioactive source consists of a known or estimated quantity of radioactive material contained within a sealed capsule, sealed between layer(s) of nonradioactive material, or firmly fixed to a nonradioactive surface by electroplating or other means intended to prevent leakage or escape of the radioactive material. Sealed radioactive sources do not include reactor fuel elements, nuclear explosive devices, and radioisotope thermoelectric generators.	Compliant: 10 CFR 835
	Source leak test means a test to determine if a sealed radioactive source is leaking radioactive material.	*Source leak test* means a test to determine if a sealed radioactive source is leaking radioactive material.	Compliant: 10 CFR 835
	Special tritium compound (STC) means any compound, except for water, that contains tritium, either intentionally (e.g., by synthesis) or inadvertently (e.g., by contamination mechanisms).	*Special tritium compound (STC)* means any compound, except for water, that contains tritium, either intentionally (e.g., by synthesis) or inadvertently (e.g., by contamination mechanisms).	Compliant: 10 CFR 835
	Stochastic effects mean malignant and hereditary diseases for which the probability of an effect occurring, rather than its severity, is regarded as a function of dose without a threshold, for radiation protection purposes.	*Stochastic effects* mean malignant and hereditary diseases for which the probability of an effect occurring, rather than its severity, is regarded as a function of dose without a threshold, for radiation protection purposes.	Compliant: 10 CFR 835
	Transuranics: As used in this RPP and as allowed by approved DOE Authorized Limits, means any radionuclide with an atomic number greater than 92, excluding plutonium-241.	*Transuranics*, as used in this manual, means any radionuclide with an atomic number greater than 92, excluding plutonium-241.	Compliant: 10 CFR 835*

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
	Very high radiation area means any area, accessible to individuals, in which radiation levels could result in an individual receiving an absorbed dose >500 rad (5 grays) in 1 hour at 1 m from a radiation source or from any surface that the radiation penetrates.	*Very high radiation area* means any area, accessible to individuals, in which radiation levels could result in an individual receiving an absorbed dose >500 rad (5 grays) in 1 hour at 1 m from a radiation source or from any surface that the radiation penetrates.	Compliant: 10 CFR 835
	Week means a period of seven consecutive days.	*Week* means a period of seven consecutive days.	Compliant: 10 CFR 835
	Year means the period of time beginning on or near January 1 and ending on or near December 31 of that same year used to determine compliance with the provisions of this part. The starting and ending date of the year used to determine compliance may be changed provided that the change is made at the beginning of the year and that no day is omitted or duplicated in consecutive years.	*Year* means the period of time beginning on or near January 1 and ending on or near December 31 of that same year used to determine compliance with the provisions of 10 CFR 835. The starting and ending date of the year used to determine compliance may be changed provided that the change is made at the beginning of the year and that no day is omitted or duplicated in consecutive years.	Compliant: 10 CFR 835
#6 §835.2(b)	As used in this part to describe various aspects of radiation dose: *Absorbed dose (D)* means the average energy imparted by ionizing radiation to the matter in a volume element per unit mass of irradiated material. The absorbed dose is expressed in units of rad (or gray) (1 rad = 0.01 grays). *Committed effective dose (E_{50})* means the sum of the committed equivalent doses to various tissues or organs in the body ($H_{T,50}$), each multiplied by the appropriate tissue weighting factor (w_T) (that is, $E_{50} = \Sigma w_T H_{T,50} + w_{Remainder} H_{Remainder,50}$, where $w_{Remainder}$ is the tissue weighting factor assigned to the remainder organs and tissues and $H_{Remainder,50}$ is the committed equivalent dose to the remainder organs and tissues). Committed effective dose is expressed in units of rem (or Sv). *Committed equivalent dose ($H_{T,50}$)* means the equivalent dose calculated to be received by a tissue or organ over a 50-year period after the intake of a radionuclide into the body. It does not include contributions from radiation sources external to the body. Committed equivalent dose is expressed in units of rem (or Sv). *Cumulative total effective dose* means the sum of all TED values recorded for an individual plus, for occupational exposures received before the implementation date of this amendment, the cumulative TED equivalent (as defined in the November 4, 1998, amendment to this rule) values recorded for an individual, where available, for each year occupational dose was received, beginning January 1, 1989.	As reflected in the CPCCo RCM Glossary to describe various aspects of radiation dose: *Absorbed dose (D)* means the average energy imparted by ionizing radiation to the matter in a volume element per unit mass of irradiated material. The absorbed dose is expressed in units of rad (or gray) (1 rad = 0.01 grays). *Committed effective dose (E_{50})* means the sum of the committed equivalent doses to various tissues or organs in the body ($H_{T,50}$), each multiplied by the appropriate tissue weighting factor (w_T) (that is, $E_{50} = \Sigma w_T H_{T,50} + w_{Remainder} H_{Remainder,50}$,where $w_{Remainder}$ is the tissue weighting factor assigned to the remainder organs and tissues and $H_{Remainder,50}$ is the committed equivalent dose to the remainder organs and tissues). Committed effective dose is expressed in units of rem (or Sv). *Committed equivalent dose ($H_{T,50}$)* means the equivalent dose calculated to be received by a tissue or organ over a 50-year period after the intake of a radionuclide into the body. It does not include contributions from radiation sources external to the body. Committed equivalent dose is expressed in units of rem (or Sv). *Cumulative total effective dose* means the sum of all TED values recorded for an individual plus, for occupational exposures received before the implementation date of this amendment to 10 CFR 835, the cumulative TED equivalent (as defined in the November 4, 1998, amendment to 10 CFR 835) values recorded for an individual, where available, for each year occupational dose was received, beginning January 1, 1989.	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
	Dose is a general term for absorbed dose, equivalent dose, effective dose, committed equivalent dose, committed effective dose, or TED as defined in this part. *Effective dose (E)* means the summation of the products of the equivalent dose received by specified tissues or organs of the body (H_T) and the appropriate tissue weighting factor (w_T) (that is, $E = \Sigma w_T H_T$). It includes the dose from radiation sources internal and/or external to the body. For purposes of compliance with this part, equivalent dose to the whole body may be used as effective dose for external exposures. The effective dose is expressed in units of rem (or Sv). *Equivalent dose* (H_T) means the product of average absorbed dose ($D_{T,R}$) in rad (or gray) in a tissue or organ (T) and a radiation (R) weighting factor (w_R). For external dose, the equivalent dose to the whole body is assessed at a depth of 1 cm in tissue; the equivalent dose to the lens of the eye is assessed at a depth of 0.3 cm in tissue, and the equivalent dose to the extremity and skin is assessed at a depth of 0.007 cm in tissue. Equivalent dose is expressed in units of rem (or Sv). *External dose or exposure* means that portion of the equivalent dose received from radiation sources outside the body (i.e., external sources). *Extremity* means hands and arms below the elbow or feet and legs below the knee. *Internal dose or exposure* means that portion of the equivalent dose received from radioactive material taken into the body (i.e., internal sources). *Radiation weighting factor (w_R)* means the modifying factor used to calculate the equivalent dose from the average tissue or organ absorbed dose; the absorbed dose (expressed in rad or gray) is multiplied by the appropriate radiation weighting factor. The radiation weighting factors to be used for determining equivalent dose in rem are as follows: **RADIATION WEIGHTING FACTORS[1], w_R** Type and energy range — w_R Photons, electrons and muons, all energies ..... 1 Neutrons, energy < 10 keV[2, 3] ..... 5 Neutrons, energy 10 keV to 100 keV[2, 3] 10	*Dose* is a general term for absorbed dose, equivalent dose, effective dose, committed equivalent dose, committed effective dose, or TED as defined in 10 CFR 835. *Effective dose (E)* means the summation of the products of the equivalent dose received by specified tissues or organs of the body (H_T) and the appropriate tissue weighting factor (w_T) (that is, $E = \Sigma w_T H_T$). It includes the dose from radiation sources internal and/or external to the body. For purposes of compliance with this part, equivalent dose to the whole body may be used as effective dose for external exposures. The effective dose is expressed in units of rem (or Sv). *Equivalent dose* (H_T) means the product of average absorbed dose ($D_{T,R}$) in rad (or gray) in a tissue or organ (T) and a radiation (R) weighting factor (w_R). For external dose, the equivalent dose to the whole body is assessed at a depth of 1 cm in tissue; the equivalent dose to the lens of the eye is assessed at a depth of 0.3 cm in tissue, and the equivalent dose to the extremity and skin is assessed at a depth of 0.007 cm in tissue. Equivalent dose is expressed in units of rem (or Sv). *External dose or exposure* means that portion of the equivalent dose received from radiation sources outside the body (i.e., external sources). *Extremity* means hands and arms below the elbow or feet and legs below the knee. *Internal dose or exposure* means that portion of the equivalent dose received from radioactive material taken into the body (i.e., internal sources). *Radiation weighting factor (w_R)* means the modifying factor used to calculate the equivalent dose from the average tissue or organ absorbed dose; the absorbed dose (expressed in rad or gray) is multiplied by the appropriate radiation weighting factor. The radiation weighting factors to be used for determining equivalent dose in rem are as follows: **RADIATION WEIGHTING FACTORS, w_R** Type and energy range — w_R Photons, electrons and muons, all energies 1	

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
	Neutrons, energy > 100 keV to 2 MeV[2, 3] ..... 20 Neutrons, energy > 2 MeV to 20 MeV[2, 3] ..... 10 Neutrons, energy > 20 MeV[2, 3] ..... 5 Protons, other than recoil protons, energy > 2 MeV ..... 5 Alpha particles, fission fragments, heavy nuclei ..... 20 [1] All values relate to the radiation incident on the body or, for internal sources, emitted from the source. [2] When spectral data are insufficient to identify the energy of the neutrons, a radiation weighting factor of 20 shall be used. [3] When spectral data are sufficient to identify the energy of the neutrons, the following equation may be used to determine a neutron radiation weighting factor value: $W_R = 5 + 17e^{\left[\frac{-(\ln(2E_n))^2}{6}\right]}$ where: E_n is the neutron energy in MeV. *Tissue weighting factor* (w_T) means the fraction of the overall health risk, resulting from uniform, whole body irradiation, attributable to specific tissue (T). The equivalent dose to tissue (H_T) is multiplied by the appropriate tissue weighting factor to obtain the effective dose (E) contribution from that tissue. The tissue weighting factors are as follows: **TISSUE WEIGHTING FACTORS FOR VARIOUS ORGANS AND TISSUES** Organs or tissues, Tissue weighting factor, w_T Gonads ..... 0.20 Red bone marrow ..... 0.12 Colon ..... 0.12 Lungs ..... 0.12 Stomach ..... 0.12 Bladder ..... 0.05 Breast ..... 0.05 Liver ..... 0.05 Esophagus ..... 0.05 Thyroid ..... 0.05 Skin ..... 0.01 Bone surfaces ..... 0.01 Remainder[1] ..... 0.05 Whole body[2] 1.00	Neutrons, energy < 10 keV[2, 3] ..... 5 Neutrons, energy 10 keV to 100 keV[2, 3] ..... 10 Neutrons, energy > 100 keV to 2 MeV[2, 3] ..... 20 Neutrons, energy > 2 MeV to 20 MeV[2, 3] ..... 10 Neutrons, energy > 20 MeV[2, 3] ..... 5 Protons, other than recoil protons, energy > 2 MeV ..... 5 Alpha particles, fission fragments, heavy nuclei ..... 20 [1] All values relate to the radiation incident on the body or, for internal sources, emitted from the source. [2] When spectral data are insufficient to identify the energy of the neutrons, a radiation weighting factor of 20 shall be used. [3] When spectral data are sufficient to identify the energy of the neutrons, the following equation may be used to determine a neutron radiation weighting factor value: $W_R = 5 + 17e^{\left[\frac{-(\ln(2E_n))^2}{6}\right]}$ where: E_n is the neutron energy in MeV. *Tissue weighting factor* (w_T) means the fraction of the overall health risk, resulting from uniform, whole body irradiation, attributable to specific tissue (T). The equivalent dose to tissue (H_T) is multiplied by the appropriate tissue weighting factor to obtain the effective dose (E) contribution from that tissue. The tissue weighting factors are as follows: **TISSUE WEIGHTING FACTORS FOR VARIOUS ORGANS AND TISSUES** Organs or tissues, Tissue weighting factor, w_T Gonads ..... 0.20 Red bone marrow ..... 0.12 Colon ..... 0.12 Lungs ..... 0.12 Stomach ..... 0.12 Bladder ..... 0.05 Breast ..... 0.05 Liver ..... 0.05 Esophagus ..... 0.05 Thyroid ..... 0.05 Skin 0.01	

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
	[1] ''Remainder'' means the following additional tissues and organs and their masses, in grams, following parenthetically: adrenals (14), brain (1,400), extrathoracic airways (15), small intestine (640), kidneys (310), muscle (28,000), pancreas (100), spleen (180), thymus (20), and uterus (80). The equivalent dose to the remainder tissues ($H_{remainder}$), is normally calculated as the mass-weighted mean dose to the preceding ten organs and tissues. In those cases in which the most highly irradiated remainder tissue or organ receives the highest equivalent dose of all the organs, a weighting factor of 0.025 (half of remainder) is applied to that tissue or organ and 0.025 (half of remainder) to the mass-weighted equivalent dose in the rest of the remainder tissues and organs to give the remainder equivalent dose. [2] For the case of uniform external irradiation of the whole body, a tissue weighting factor (w_T) equal to 1 may be used in determination of the effective dose. *Total effective dose (TED)* means the sum of the effective dose (for external exposures) and the committed effective dose. *Whole body* means, for the purposes of external exposure, head, trunk (including male gonads), arms above and including the elbow, or legs above and including the knee.	Bone surfaces ..... 0.01 Remainder[1] ..... 0.05 Whole body[2] ..... 1.00 [1] ''Remainder'' means the following additional tissues and organs and their masses, in grams, following parenthetically: adrenals (14), brain (1,400), extrathoracic airways (15), small intestine (640), kidneys (310), muscle (28,000), pancreas (100), spleen (180), thymus (20), and uterus (80). The equivalent dose to the remainder tissues ($H_{remainder}$), is normally calculated as the mass-weighted mean dose to the preceding ten organs and tissues. In those cases in which the most highly irradiated remainder tissue or organ receives the highest equivalent dose of all the organs, a weighting factor of 0.025 (half of remainder) is applied to that tissue or organ and 0.025 (half of remainder) to the mass-weighted equivalent dose in the rest of the remainder tissues and organs to give the remainder equivalent dose. [2] For the case of uniform external irradiation of the whole body, a tissue weighting factor (w_T) equal to 1 may be used in determination of the effective dose. *Total effective dose (TED)* means the sum of the effective dose (for external exposures) and the committed effective dose. *Whole body* means, for the purposes of external exposure, head, trunk (including male gonads), arms above and including the elbow, or legs above and including the knee.	
#7 §835.2(c)	Terms defined in the *Atomic Energy Act of 1954* or in 10 CFR 820 and not defined in this part are used consistent with their meanings given in the *Atomic Energy Act of 1954* or in 10 CFR 820.	As reflected in the CPCCo RCM Glossary Note: Terms defined in the *Atomic Energy Act of 1954* or in 10 CFR 820 and not defined in this part are used consistent with their meanings given in the *Atomic Energy Act of 1954* or in 10 CFR 820.	Compliant: 10 CFR 835
§835.3, "General Rule"			
#8 §835.3(a)	No person or DOE personnel shall take or cause to be taken any action inconsistent with the requirements of: (1) This part; or (2) Any program, plan, schedule, or other process established by this part.	***Article 113.1*** **(excerpt)** No person or DOE personnel shall [§835.3(a)] take or cause to be taken any action inconsistent with the requirements of 10 CFR 835 or Any program, plan, schedule, or other process established by 10 CFR 835.	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
#9 §835.3(b)	With respect to a particular DOE activity, contractor management shall be responsible for compliance with the requirements of this part.	***Article 113.1*** **(excerpt)** With respect to a particular DOE activity, CPCCo management shall [§835.3(b)] be responsible for compliance with the requirements of 10 CFR 835.	Compliant: 10 CFR 835
#10 §835.3(c)	Where there is no contractor for a DOE activity, DOE shall ensure implementation of and compliance with the requirements of this part.	The scope of this RPP is limited to contractor activities (see Chapter 3 of the CPCCo RPP).	Compliant: 10 CFR 835
#11 §835.3(d)	Nothing in this part shall be construed as limiting actions that may be necessary to protect health and safety.	***Article 113.1*** **(excerpt and modified)** Nothing in this manual shall [§835.3(d)] be construed as limiting actions that may be necessary to protect health and safety.	Compliant: 10 CFR 835
#12 §835.3(e)	For those activities that are required by §835.102, §835.901(e), §835.1202(a), and §835.1202(b), the time interval to conduct these activities may be extended by a period not to exceed 30 days to accommodate scheduling needs.	***Article 113.1*** **(excerpt)** For those activities that are required by Articles 131, 431.3, 431.4, and 613.8, the time interval to conduct these activities may be extended by a period not to exceed 30 days to accommodate scheduling needs [§835.3(e)].	Compliant: 10 CFR 835
§835.4, "Radiological Units"			
#13 §835.4	Unless otherwise specified, the quantities used in the records required by this part shall be clearly indicated in special units of curie, rad, roentgen, or rem, including multiples and subdivisions of these units, or other conventional units such as, dpm, dpm/100 cm^2, or mass units. The SI units, becquerel (Bq), gray (Gy), and sievert (Sv), may be provided parenthetically for reference with scientific standards.	***Article 713.3*** **(excerpt)** Unless otherwise specified, the quantities used in the records required by this manual shall [§835.4] be clearly indicated in special units of curie, rad, roentgen, or rem, including multiples and subdivisions of these units, or other conventional units such as, dpm, dpm/100 cm^2, or mass units. The SI units, becquerel (Bq), gray (Gy), and sievert (Sv), may be provided parenthetically for reference with scientific standards.	Compliant: 10 CFR 835
Subpart B, "Management and Administrative Requirements"			
§835.101, "Radiation Protection Programs"			
#14 §835.101(a)	A DOE activity shall be conducted in compliance with a documented RPP, as approved by DOE.	In accordance with Chapter 2 of the CPCCo RPP, CPCCo establishes the documentation to implement §835.101(a). The CPCCo RPP will be managed and controlled through the CPCCo document control process.	Compliant: 10 CFR 835
#15 §835.101(b)	The DOE may direct or make modifications to an RPP.	CPCCo accepts provision §835.101(b) as written.	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
#16 §835.101(c)	The content of each RPP shall be commensurate with the nature of the activities performed and…	CPCCo's approved RPP establishes the documentation to implement §835.101(c) as written. The RPP will be managed and controlled through the establishment of appropriate administrative measures. Note: "Commensurate with the nature of the activities performed" is the nature of those activities performed by CPCCo, its subcontractors, and suppliers at CPCCo-managed facilities and activities, as specified in Contract No. 89303320DEM000030.	Compliant: 10 CFR 835
#17 §835.101(c)	…shall include formal plans and measures for applying the ALARA process to occupational exposure.	This requirement is implemented through the CPCCo Occupational ALARA Program, ALARA Management Plan, CPCC-MP-RP-55025 which addresses the elements of ALARA program as specified in the RPP guide, DOE G 441.1-1C, Section 4.2.0: • Policy and Management Commitment • ALARA Training • Plans and Procedures • Internal Assessments/Audits • ALARA Design Review • Radiological Work/Experiment Administration and Planning • Records	Compliant: 10 CFR 835
#18 §835.101(d)	The RPP shall specify the existing and/or anticipated operational tasks that are intended to be within the scope of the RPP.	See Chapter 3 of the CPCCo RPP. The RPP is managed through the establishment of appropriate administrative measures.	Compliant: 10 CFR 835
#19 §835.101(d)	Except as provided in §835.101(h), any task outside the scope of a RPP shall not be initiated until an update of the RPP is approved by DOE.	If any radiological activities are determined to be outside the scope of RPP (as defined in Chapter 3), except as provided in §835.101(h), CPCCo shall obtain DOE approval of the revised RPP prior to initiating the activities (See Chapter 2, Section 2.2.2 of this RPP).	Compliant: 10 CFR 835
#20 §835.101(e)	The content of the RPP shall address, but shall not necessarily be limited to, each requirement in this part.	The CPCCo RPP implements §835.101(e) as written.	Compliant: 10 CFR 835
#21 §835.101(f)	The RPP shall include plans, schedules, and other measures for achieving compliance with regulations of this part.	Upon DOE approval, the CPCCo RPP establishes the documentation to implement §835.101(f) as written (see Chapter 10 and Appendix B of this RPP).	Compliant: 10 CFR 835
#22 §835.101(f)	Unless otherwise specified in this part, compliance with amendments to this part published on June 8, 2007, shall be achieved no later than July 9, 2010.	Upon DOE approval, the CPCCo RPP establishes the documentation to implement §835.101(f) as written (see Chapter 10 of this RPP).	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
#23 §835.101(g)(1)	An update of the RPP shall be submitted to DOE: (1) Whenever a change or an addition to the RPP is made;	CPCCo accepts requirement §835.101(g)(1) as written. The RPP is managed and controlled through the establishment of appropriate administrative measures.	Compliant: 10 CFR 835
#24 §835.101(g)(2)	(2) Prior to the initiation of a task not within the scope of the RPP; or	CPCCo accepts requirement §835.101(g)(2) as written. The RPP will be managed and controlled through the establishment of appropriate administrative measures. Note: See Chapter 2, Section 2.2.2 of this RPP.	Compliant: 10 CFR 835
#25 §835.101(g)(3)	(3) Within 180 days of the effective date of any modifications to this part.	CPCCo accepts requirement §835.101(g)(3) as written. The RPP will be managed and controlled through the establishment of appropriate administrative measures	Compliant: 10 CFR 835
#26 §835.101(h).1	Changes, additions, or updates to the RPP may become effective without prior Department approval only if the changes do not decrease the effectiveness of the RPP and the RPP, as changed, continues to meet the requirements of this part.	CPCCo accepts the requirement as written. CPCCo will apply the guidelines of DOE G 441.1-1C, Section 3.1 when making the determination of "changes that decrease the effectiveness" of the RPP.	Compliant: 10 CFR 835
#27 §835.101(h).2	Proposed changes that decrease the effectiveness of the RPP shall not be implemented without submittal to and approval by the Department.	CPCCo accepts the requirement as written. The RPP will be managed and controlled through the establishment of appropriate administrative measures.	Compliant: 10 CFR 835
#28 §835.101(i)	An initial RPP or an update shall be considered approved 180 days after its submission unless rejected by DOE at an earlier date.	CPCCo accepts requirement §835.101(i) as written. The RPP will be managed and controlled through the establishment of appropriate administrative measures.	Compliant: 10 CFR 835
§835.102, "Internal Audits"			
#29 §835.102	Internal audits of the RPP, including examination of program content and implementation, shall be conducted through a process that ensures that all functional elements are reviewed no less frequently than every 36 months.	***Article 131*** **(excerpt)** Internal audits of the RPP, including examination of program content and implementation, shall [§835.102] be conducted through a process that ensures that all functional elements are reviewed no less frequently than every 36 months. Note: CPCCo will apply the graded approach by assessing the functional elements of 10 CFR 835 no less frequently than every 36 months. CPCCo will follow the guidelines provided in DOE G 441.1-1C, Sections 3.2.3 and 3.3.	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
§835.103, "Education, Training, and Skills"			
#30 §835.103	Individuals responsible for developing and implementing measures necessary for ensuring compliance with the requirements of this part shall have the appropriate education, training, and skills to discharge these responsibilities.	***Article 141.4*** **(excerpt)** CPCCo shall [§835.103] identify positions that develop and implement measures necessary to comply with 10 CFR 835. At a minimum, this includes those individuals filling the following positions: • RCTs • First line Radiological Control managers • Senior Radiological Control technical staff • Facility/project Radiological Control technical staff • Facility/project Radiological Control managers • Radiological protection manager • Radiation protection programs manager • RWP preparers • Lead radiological assessor • Managers (including lead workers) with the authority and responsibility for radiological work and/or program oversight • Selected individuals will be trained as source custodians, containment installers, and/or inspectors. ***Article 611*** **(excerpt and modified)** Individuals responsible for developing and implementing measures necessary for ensuring compliance with the requirements of this manual shall [§835.103] have the appropriate education, training, and skills to discharge these responsibilities. Note: Application of this requirement uses a graded approach for implementation by identifying the positions in Article 141.4.	Compliant: 10 CFR 835
§835.104, "Written Procedures"			
#31 §835.104	Written procedures shall be developed and implemented as necessary to ensure compliance with this part, commensurate with the radiological hazards created by the activity and consistent with the education, training, and skills of the individuals exposed to those hazards.	***Article 122.2*** **(excerpt)** Written procedures shall [§835.104] be developed and implemented as necessary to ensure compliance with 10 CFR 835, commensurate with the radiological hazards created by the activity and consistent with the education, training, and skills of the individuals exposed to those hazards.	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
		Note: CPCCo will apply the guidance identified in DOE G 441.1-1C, Section 3.2.0 toward the implementation of CPCCo RPP procedures.	
Subpart C, "Standards for Internal and External Exposure"			
§835.202, "Occupational Dose Limits for General Employees"			
#32 §835.202(a)(1)	Except for planned special exposures conducted consistent with §835.204 and emergency exposures authorized in accordance with §835.1302, the occupational dose received by general employees shall be controlled such that the following limits are not exceeded in a year: (1) A TED of 5 rem (0.05 Sv);	***Article 213.1*** **(excerpt)** Occupational dose limits are provided in Table 2-1 and shall [§835.202(a), §835.206(a), and §835.207] not be exceeded. Except for planned special exposures conducted consistent with Article 213.3 and emergency exposures authorized in accordance with Article 213.4, the occupational dose received by general employees shall [§835.202(a)] be controlled such that the limits in Table 2-1 are not exceeded in a year. ***Table 2-1*** **(excerpt and modified)** General employee: A TED of 5 rem (0.05 Sv);	Compliant: 10 CFR 835
#33 §835.202(a)(2)	(2) The sum of equivalent dose to the whole body for external exposures and the committed equivalent dose to any organ or tissue other than the skin or the lens of the eye of 50 rem (0.5 Sv);	***Article 213.1*** **(excerpt)** Occupational dose limits are provided in Table 2-1 and shall [§835.202(a), §835.206(a), and §835.207] not be exceeded. Except for planned special exposures conducted consistent with Article 213.3 and emergency exposures authorized in accordance with Article 213.4, the occupational dose received by general employees shall [§835.202(a)] be controlled such that the limits in Table 2-1 are not exceeded in a year. ***Table 2-1*** **(excerpt and modified)** • General employee: The sum of equivalent dose to the whole body for external exposures and the committed equivalent dose to any organ or tissue other than the skin or the lens of the eye of 50 rem (0.5 Sv). • ***Note 2***: The annual limit of dose to "any organ or tissue" is based on the committed equivalent dose to that organ or tissue resulting from internally deposited radionuclides over a 50-year period after intake plus any equivalent dose to that organ from external exposures during the year.	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
#34 §835.202(a)(3)	(3) An equivalent dose to the lens of the eye of 15 rem (0.15 Sv); and	***Article 213.1*** **(excerpt)** Occupational dose limits are provided in Table 2-1 and shall [§835.202(a), §835.206(a), and §835.207] not be exceeded. Except for planned special exposures conducted consistent with Article 213.3 and emergency exposures authorized in accordance with Article 213.4, the occupational dose received by general employees shall [§835.202(a)] be controlled such that the limits in Table 2-1 are not exceeded in a year. ***Table 2-1*** **(excerpt and modified)** • An equivalent dose to the lens of the eye of 15 rem (0.15 Sv); and	Compliant: 10 CFR 835
#35 §835.202(a)(4)	(4) The sum of the equivalent dose to the skin or to any extremity for external exposures and the committed equivalent dose to the skin or to any extremity of 50 rem (0.5 Sv).	***Article 213.1*** **(excerpt)** Occupational dose limits are provided in Table 2-1 and shall [§835.202(a), §835.206(a), and §835.207] not be exceeded. Except for planned special exposures conducted consistent with Article 213.3 and emergency exposures authorized in accordance with Article 213.4, the occupational dose received by general employees shall [§835.202(a)] be controlled such that the limits in Table 2-1 are not exceeded in a year. ***Table 2-1*** **(excerpt and modified)** • General Employee: The sum of the equivalent dose to the skin or to any extremity for external exposures and the committed equivalent dose to the skin or to any extremity of 50 rem (0.5 Sv). • ***Note 4***: Non-uniform exposures of the skin from X-rays, beta radiation, and/or radioactive material on the skin shall [§835.205] be assessed as specified in Appendix 2C.	Compliant: 10 CFR 835
#36 §835.202(b)	All occupational doses received during the current year, except doses resulting from planned special exposures conducted in compliance with §835.204 and emergency exposures authorized in accordance with §835.1302, shall be included when demonstrating compliance with §835.202(a) and §835.207.	***Article 213.1.b*** **(excerpt and modified)** All occupational doses received during the current year, except doses resulting from planned special exposures conducted in compliance Article 213.3 and emergency exposures authorized in accordance with Article 213.4, shall [§835.1(c) and §835.202(b)] be included when demonstrating compliance with Table 2-1, occupational dose limits for general employees and minors. ***Table 2-1*** **(excerpt)** "Summary of Dose Limits"	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
#37 §835.202(c)	Doses from background, therapeutic and diagnostic medical radiation, and participation as a subject in medical research programs shall not be included in dose records or in the assessment of compliance with the occupational dose limits.	***Table 2-1 Note 3*** **(excerpt)** Doses from background, therapeutic and diagnostic medical radiation, and participation as a subject in medical research programs shall [§835.202(c)] not be included in dose records or in the assessment of compliance with the occupational dose limits.	Compliant: 10 CFR 835
§835.203, "Combining Internal and External Equivalent Doses"			
#38 §835.203(a)	The TED during a year shall be determined by summing the effective dose from external exposures and the committed effective dose from intakes during the year.	***Table 2-1 Note 1*** **(excerpt)** Internal dose to the whole body shall [§835.203(a)] be calculated as committed effective dose. The committed effective dose is the resulting dose committed to the whole body from internally deposited radionuclides over a 50-year period after intake. ***Table 2-1 Note 5*** The TED during a year shall [§835.203(a)] be determined by summing the effective dose from external exposures and the committed effective dose from intakes during the year.	Compliant: 10 CFR 835
#39 §835.203(b)	Determinations of the effective dose shall be made using the radiation and tissue weighting factor values provided in §835.2.	***Table 2-1 Note 1*** **(excerpt)** Determinations of the effective dose shall [§835.203(b)] be made using the radiation and tissue weighting factor values provided in the RCM Glossary.	Compliant: 10 CFR 835
§835.204, "Planned Special Exposures"			
#40 §835.204(a)(1)	A planned special exposure may be authorized for a radiological worker to receive doses in addition to and accounted for separately from the doses received under the limits specified in §835.202(a), provided that each of the following conditions is satisfied: (1) The planned special exposure is considered only in an exceptional situation when alternatives that might prevent a radiological worker from exceeding the limits in §835.202(a) are unavailable or impractical;	***Article 213.3.a*** **(excerpt)** A planned special exposure may be authorized for a radiological worker to receive doses in addition to and accounted for separately from the doses received under the limits for general employees specified in Table 2-1, provided that each of the following conditions is satisfied: • The planned special exposure is considered only in an exceptional situation when alternatives that might prevent a radiological worker from exceeding the limits in Table 2-1 are unavailable or impractical; Note: No planned special exposures are anticipated to occur. In the event of a planned special exposure occurring, the provisions outlined in Articles 213.1, 213.1.b, 213.3, 722.1, 722.1.c and 722.10 will be followed.	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
#41 §835.204(a)(2)	(2) The contractor management (and employer, if the employer is not the contractor) specifically requests the planned special exposure, in writing; and	***Article 213.3.a* (excerpt)** A planned special exposure may be authorized for a radiological worker to receive doses in addition to and accounted for separately from the doses received under the limits for general employees specified in Table 2-1, provided that each of the following conditions is satisfied: • The contractor management (and employer, if the employer is not the contractor) specifically requests the planned special exposure, in writing; and	Compliant: 10 CFR 835
#42 §835.204(a)(3)	(3) Joint written approval is received from the appropriate DOE Headquarters program office and the Secretarial Officer responsible for environment, safety, and health matters.	***Article 213.3.a* (excerpt)** A planned special exposure may be authorized for a radiological worker to receive doses in addition to and accounted for separately from the doses received under the limits for general employees specified in Table 2-1, provided that each of the following conditions is satisfied: • Joint written approval is received from the appropriate DOE Headquarters program office and the Secretarial Officer responsible for environment, safety, and health matters.	Compliant: 10 CFR 835
#43 §835.204(b)	Prior to requesting an individual to participate in an authorized planned special exposure, the individual's dose from all previous planned special exposures and all doses in excess of the occupational dose limits shall be determined.	***Article 213.3.b* (excerpt)** Prior to requesting an individual to participate in an authorized planned special exposure, the individual's dose from all previous planned special exposures and all doses in excess of the occupational dose limits shall [§835.204(b)] be determined.	Compliant: 10 CFR 835
#44 §835.204(c)(1)	An individual shall not receive a planned special exposure that, in addition to the doses determined in §835.204(b), would result in a dose exceeding the following: (1) In a year, the numerical values of the dose limits established at §835.202(a); and	***Article 213.3.c* (excerpt)** An individual shall [§835.204(c)] not receive a planned special exposure that, in addition to the doses determined in Article 213.3.b, would result in a dose exceeding the following: • In a year, the numerical values of the dose limits established at Table 2-1 for general employees; and	Compliant: 10 CFR 835
#45 §835.204(c)(2)	(2) Over the individual's lifetime, five times the numerical values of the dose limits established at §835.202(a).	***Article 213.3.c* (excerpt)** An individual shall [§835.204(c)] not receive a planned special exposure that, in addition to the doses determined in Article 213.3.b, would result in a dose exceeding the following: • Over the individual's lifetime, five times the numerical values of the dose limits established at Table 2-1 for general employees.	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
#46 §835.204(d)	Prior to a planned special exposure, written consent shall be obtained from each individual involved.	***Article 213.3.d*** **(excerpt)** Prior to a planned special exposure, written consent shall [§835.204(d)] be obtained from each individual involved.	Compliant: 10 CFR 835
#47 §835.204(d)(1)	Each such written consent shall include: (1) The purpose of the planned operations and procedures to be used;	***Article 213.3.d*** **(excerpt)** Each such written consent shall [§835.204(d)] include: • The purpose of the planned operations and procedures to be used;	Compliant: 10 CFR 835
#48 §835.204(d)(2)	(2) The estimated doses and associated potential risks and specific radiological conditions and other hazards that might be involved in performing the task; and	***Article 213.3.d*** **(excerpt)** Each such written consent shall [§835.204(d)] include: • The estimated doses and associated potential risks and specific radiological conditions and other hazards which might be involved in performing the task; and	Compliant: 10 CFR 835
#49 §835.204(d)(3)	(3) Instructions on the measures to be taken to keep the dose ALARA considering other risks that may be present.	***Article 213.3.d*** **(excerpt)** Each such written consent shall [§835.204(d)] include: • Instructions on the measures to be taken to keep the dose ALARA considering other risks that may be present.	Compliant: 10 CFR 835
#50 §835.204(e)	Records of the conduct of a planned special exposure shall be maintained, and	***Article 213.3.e*** **(excerpt)** Records of the conduct of a planned special exposure shall [§835.204(e)] be maintained, and	Compliant: 10 CFR 835
#51 §835.204(e)	A written report submitted within 30 days after the planned special exposure to the approving organizations identified in §835.204(a)(3).	***Article 213.3.e*** **(excerpt)** a written report submitted within 30 days after the planned special exposure to the approving organizations identified in Article 213.3(a).	Compliant: 10 CFR 835
#52 §835.204(f)	The dose from planned special exposures is not to be considered in controlling future occupational dose of the individual under §835.202(a) but is to be included in records and reports required under this part.	***Article 213.3.f*** **(excerpt and modified)** The dose from planned special exposures is not to be considered in controlling future occupational dose of the individual under Table 2-1 but is to be included in records and reports required by 10 CFR 835. ***Article 722.10*** **(excerpt)** Authorized emergency exposures and planned special exposures shall [§835.1301(b)] be accounted for separately but maintained with the individual's occupational exposure records.	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
§835.205, "Determination of Compliance for Non-Uniform Exposure of the Skin"			
#53 §835.205(a)	Non-uniform exposures of the skin from X-rays, beta radiation, and/or radioactive material on the skin are to be assessed as specified in this section.	***Table 2-1 Note 4*** **(excerpt)** Non-uniform exposures of the skin from X-rays, beta radiation, and/or radioactive material on the skin shall [§835.205] be assessed as specified in Appendix 2C.	Compliant: 10 CFR 835
#54 §835.205(b)(1)	For purposes of demonstrating compliance with §835.202(a)(4), assessments shall be conducted as follows: (1) *Area of skin irradiated is 100 cm^2 or more.* The non-uniform equivalent dose received during the year shall be averaged over the 100 cm^2 of the skin receiving the maximum dose, added to any uniform equivalent dose also received by the skin, and recorded as the equivalent dose to any extremity or skin for the year.	***Appendix 2C*** **(excerpt)** For the purposes of demonstrating compliance with §835.202(a)(4), assessments shall be conducted as follows: *Area of skin irradiated ≥100 cm^2:* The non-uniform equivalent dose received during the year shall [§835.205(b)(1)] be averaged over the 100 cm^2 of the skin receiving the maximum dose, added to any uniform equivalent dose e also received by the skin, and recorded as the equivalent dose to any extremity or skin for the year.	Compliant: 10 CFR 835
#55 §835.205(b)(2)	(2) *Area of skin irradiated is 10 cm^2 or more, but is <100 cm^2.* The non-uniform equivalent dose (*H*) to the irradiated area received during the year shall be added to any uniform equivalent dose also received by the skin and recorded as the equivalent dose to any extremity or skin for the year. H is the equivalent dose averaged over the 1 cm^2 of skin receiving the maximum absorbed dose (*D*) reduced by the fraction (*f*), which is the irradiated area in cm^2 divided by 100 cm^2 (i.e., $H = fD$). In no case shall a value of f <0.1 be used.	***Appendix 2C*** **(excerpt)** *Area of skin irradiated ≥10 cm^2 and <100 cm^2:* The non-uniform equivalent dose (H) to the irradiated area received during the year shall [§835.205(b)(2)] be added to any uniform equivalent dose also received by the skin and recorded as the equivalent dose to any extremity or skin for the year. H is the equivalent dose averaged over the 1 cm^2 of skin receiving the maximum absorbed dose (*D*) reduced by the fraction (*f*) which is the irradiated area in cm^2 divided by 100 cm^2 (i.e., $H = fD$). In no case shall [§835.205(b)(2)] a value of f <0.1 be used.	Compliant: 10 CFR 835
#56 §835.205(b)(3)	(3) *Area of skin irradiated is <10 cm^2.* The non-uniform equivalent dose shall be averaged over the 1 cm^2 of skin receiving the maximum dose. This equivalent dose shall: (i) Be recorded in the individual's occupational exposure history as a special entry; and (ii) Not be added to any other equivalent dose to any extremity or skin for the year.	***Appendix 2C*** **(excerpt)** *Area of skin irradiated <10 cm^2:* The non-uniform equivalent dose shall [§835.205(b)(3)] be averaged over the 1 cm^2 of skin receiving the maximum dose. This equivalent dose shall [§835.205(b)(3)]: a. Be recorded in the individual's occupational exposure history as a special entry; and b. Not be added to any other equivalent dose to any extremity or skin for the year.	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
§835.206, "Limits for the Embryo/Fetus"			
#57 §835.206(a)	The equivalent dose limit for the embryo/fetus from the period of conception to birth, as a result of occupational exposure of a declared pregnant worker, is 0.5 rem (0.005 Sv).	***Article 213.1*** **(excerpt)** Occupational dose limits are provided in Table 2-1 and shall [§835.202(a), §835.206(a), and §835.207] not be exceeded. ***Table 2-1*** **(excerpt and modified)** Declared pregnant worker: Embryo/fetus 0.5 rem per gestation period. ***Article 215.5*** **(excerpt)** For a declared pregnant worker who chooses to continue working as a radiological worker: a. The equivalent dose limit for the embryo/fetus from the period of conception to birth, as a result of occupational exposure of a declared pregnant worker, is 0.5 rem (0.005 Sv) [§835.206(a)].	Compliant: 10 CFR 835
#58 §835.206(b)	Substantial variation above a uniform exposure rate that would satisfy the limits provided in §835.206(a) shall be avoided.	***Article 215.5.b*** **(excerpt)** Substantial variation above a uniform exposure rate that would satisfy the limits provided in Table 2-1 shall [§835.206(b)] be avoided. ***Article 215.5.c*** **(excerpt)** Measures shall be taken to avoid substantial variation about the uniform exposure rate necessary to meet the 0.5 rem limit for the gestation period. Efforts shall be made to avoid exceeding 50 mrem per month to the declared pregnant worker. Note: CPCCO will apply the guideline of DOE G 441.1-1C Section 8.3 to determine "substantial variation" unless a separate technical basis is prepared and approved for the activity.	Compliant: 10 CFR 835
#59 §835.206(c)	If the equivalent dose to the embryo/fetus is determined to have already exceeded 0.5 rem (0.005 Sv) by the time a worker declares her pregnancy, the declared pregnant worker shall not be assigned to tasks where additional occupational exposure is likely during the remaining gestation period.	***Article 215.6*** If the equivalent dose to the embryo/fetus is determined to have already exceeded 0.5 rem (0.005 Sv) by the time the worker declares her pregnancy, the declared pregnant worker shall [§835.206(c)] not be assigned to tasks where additional occupational exposure is likely during the remaining gestation period.	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
§835.207, "Occupational Dose Limits for Minors"			
#60 §835.207	The dose limits for minors occupationally exposed to radiation and/or radioactive materials at a DOE activity are 0.1 rem (0.001 Sv) TED in a year and 10% of the occupational dose limits specified at §835.202(a)(3) and (a)(4).	***Article 213.1*** **(excerpt)** Occupational dose limits are provided in Table 2-1 and shall [§835.202(a), 835.206(a), and 835.207] not be exceeded. ***Table 2-1*** **(excerpt and modified)** Minors occupationally exposed: Total effective dose of 0.1 rem.. Minors occupationally exposed: Equivalent dose to the lens of the eye, skin, and extremities is 10% of general employee limits.	Compliant: 10 CFR 835
§835.208, "Limits for Members of the Public Entering a Controlled Area"			
#61 §835.208	The TED limit for members of the public exposed to radiation and/or radioactive material during access to a controlled area is 0.1 rem (0.001 Sv) in a year.	***Article 214.1*** **(excerpt)** The TED limit for members of the public exposed to radiation and/or radioactive material during access to a controlled area is [§835.208] 0.1 rem (0.001 Sv) in a year.	Compliant: 10 CFR 835
§835.209, "Concentrations of Radioactive Material in Air"			
#62 §835.209(a)	The DAC values given in Appendices A and C of this part shall be used in the control of occupational exposures to airborne radioactive material.	***Article 223.1*** The DAC values given in 10 CFR 835, Appendices A and C shall [§835.209(a)] be used in the control of occupational exposures to airborne radioactive material.	Compliant: 10 CFR 835
#63 §835.209(b)	The estimation of internal dose shall be based on bioassay data rather than air concentration values unless bioassay data are: (1) Unavailable; (2) Inadequate; or (3) Internal dose estimates based on air concentration values are demonstrated to be as or more accurate.	***Article 521.2*** The estimation of internal dose shall [§835.209(b)] be based on bioassay data rather than air concentration values unless bioassay data are: a. Unavailable; b. Inadequate; or c. Internal dose estimates based on air concentration values are demonstrated to be as or more accurate.	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
Subpart E, "Monitoring of Individuals and Areas"			
§835.401, "General Requirements"			
#64 §835.401(a)(1)	Monitoring of individuals and areas shall be performed to: (1) Demonstrate compliance with the regulations in this part;	***Article 551.1* (excerpt and modified)** Monitoring of individuals and areas shall [§835.401(a)] be performed to: a. Demonstrate compliance with the requirements of 10 CFR 835; ***Article 551.10*** Survey frequencies shall [§835.401(a) and §835.1102(a)] be established based on potential radiological conditions, probability of change in conditions, and area occupancy factors. Note: The requirements of §835.401 are subject to the graded approach through criteria established by CPCCo monitoring program. The program establishes administrative records for tracking and trending radiological conditions based on routine tasks (radiological survey reports). Task descriptions and work documents specify the frequency of radiological surveys. Workplace air sampling program defines criteria for use of continuous air monitors.	Compliant: 10 CFR 835
#65 §835.401(a)(2)	(2) Document radiological conditions;	***Article 551.1* (excerpt)** Monitoring of individuals and areas shall [§835.401(a)] be performed to: b. Document radiological conditions; ***Article 551.10*** Survey frequencies shall [§835.401(a) and §835.1102(a)] be established based on potential radiological conditions, probability of change in conditions, and area occupancy factors.	Compliant: 10 CFR 835
#66 §835.401(a)(3)	(3) Detect changes in radiological conditions;	***Article 551.1* (excerpt)** Monitoring of individuals and areas shall [§835.401(a)] be performed to: c. Detect changes in radiological conditions; ***Article 551.10*** Survey frequencies shall [§835.401(a) and §835.1102(a)] be established based on potential radiological conditions, probability of change in conditions, and area occupancy factors.	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
#67 §835.401(a)(4)	(4) Detect the gradual buildup of radioactive material;	***Article 551.1* (excerpt)** Monitoring of individuals and areas shall [§835.401(a)] be performed to: d. Detect the gradual buildup of radioactive material; ***Article 551.10*** Survey frequencies shall [§835.401(a) and §835.1102(a)] be established based on potential radiological conditions, probability of change in conditions, and area occupancy factors.	Compliant: 10 CFR 835
#68 §835.401(a)(5)	(5) Verify the effectiveness of engineered and administrative controls in containing radioactive material and reducing radiation exposure; and	***Article 551.1* (excerpt)** Monitoring of individuals and areas shall [§835.401(a)] be performed to: e. Verify the effectiveness of engineered and administrative controls in containing radioactive material and reducing radiation exposure; and ***Article 551.10*** Survey frequencies shall [§835.401(a) and §835.1102(a)] be established based on potential radiological conditions, probability of change in conditions, and area occupancy factors.	Compliant: 10 CFR 835
#69 §835.401(a)(6)	(6) Identify and control potential sources of individual exposure to radiation and/or radioactive material.	***Article 551.1* (excerpt)** Monitoring of individuals and areas shall [§835.401(a)] be performed to: f. Identify and control potential sources of individual exposure to radiation and/or radioactive material. ***Article 551.10*** Survey frequencies shall [§835.401(a) and §835.1102(a)] be established based on potential radiological conditions, probability of change in conditions, and area occupancy factors.	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
#70 §835.401(b)(1)	Instruments and equipment used for monitoring shall be: (1) Periodically maintained and calibrated on an established frequency;	***Article 551.5* (excerpt and modified)** Instruments and equipment used for monitoring shall [§835.401(b)] be: a. Periodically maintained and calibrated on an established frequency; ***Article 561.1*** Radiological instruments and equipment shall [§835.401(b)(1)] be periodically maintained and calibrated on an established frequency. ***Article 561.3*** All radiological monitoring instruments, including pocket and electronic dosimeters, and area radiation monitoring instruments, shall [§835.401(b)(1)] be maintained and calibrated on an established frequency. Note: For the purposes of the CPCCo RPP, this requirement applies to instruments used for occupational radiation protection monitoring and not for process controls. ***Article 562.3*** Radiological instruments shall [§835.401(b)(1)] undergo calibration prior to use following any preventive or corrective maintenance or any adjustment that voids the previous calibration. A battery change is not normally considered maintenance.	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
#71 §835.401(b)(2)	(2) Appropriate for the type(s), levels, and energies of the radiation(s) encountered;	***Article 551.5* (excerpt)** Instruments and equipment used for monitoring shall [§835.401(b)] be: b. Appropriate for the type(s), levels and energies of the radiation(s) encountered. ***Article 561.1.a* (excerpt)** Radiological instruments and equipment shall [§835.401(b)(2)] be used only to measure the radiation for which their calibrations are valid. ***Article 561.6*** In unusual and limited situations, it may be necessary to use an instrument in an application other than that envisioned by the manufacturer. Special calibrations shall be performed for use of instrumentation outside manufacturer's specifications. The instrument shall be adjusted, calibrated, and labeled to identify the special conditions and used only under the special conditions for which it was calibrated.	Compliant: 10 CFR 835
#72 §835.401(b)(3)	(3) Appropriate for existing environmental conditions; and	***Article 551.5* (excerpt)** Instruments and equipment used for monitoring shall [§835.401(b)] be: c. Appropriate for the existing environmental conditions; and… ***Article 561.4*** The effects of environmental conditions, including interfering radiation, on an instrument shall [§835.401(b)(3)] be known prior to use. ***Article 561.6*** In unusual and limited situations, it may be necessary to use an instrument in an application other than that envisioned by the manufacturer. Special calibrations shall be performed for use of instrumentation outside manufacturer's specifications. The instrument shall be adjusted, calibrated, and labeled to identify the special conditions and used only under the special conditions for which it was calibrated.	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
#73 §835.401(b)(4)	(4) Routinely tested for operability.	***Article 551.5.*** **(excerpt)** Instruments and equipment used for monitoring shall [10 CFR 835.401(b)] be: d. Routinely tested for operability. ***Article 555.7 (*****excerpt and modified)** The proper operation of continuous air monitoring equipment shall [§835.401(b)(4)] be routinely tested by performing an operational check. Note: For the purposes of this RPP, functional tests of alarm systems are those systems used for occupational radiation protection and not process controls.	Compliant: 10 CFR 835
§835.402, "Individual Monitoring"			
#74 §835.402(a)(1)(i)	For the purpose of monitoring individual exposures to external radiation, personnel dosimeters shall be provided to and used by: (1) Radiological workers who, under typical conditions, are likely to receive one or more of the following: (i) An effective dose of 0.1 rem (0.001 Sv) or more in a year;	***Article 511.1.a*** **(excerpt)** For the purpose of monitoring individual exposures to external radiation, personnel dosimeters shall [§835.402(a)] be provided to and used by: a. Radiological workers who, under typical conditions, are likely to receive one or more of the following; -- An effective dose of 0.1 rem (0.001 Sv) or more in a year;… Note: "Are likely to receive" recognizes that professional judgment and experience will be used in making decisions in specific circumstances. [DOE G 441.1-1-C, Section 3.1.] This note applies to RPP #74–#79.	Compliant: 10 CFR 835
#75 §835.402 (a)(1)(ii)	(ii) An equivalent dose to the skin or to any extremity of 5 rem (0.05 Sv) or more in a year;	***Article 511.1.a*** **(excerpt)** For the purpose of monitoring individual exposures to external radiation, personnel dosimeters shall [§835.402(a)] be provided to and used by: a. Radiological workers who, under typical conditions, are likely to receive one or more of the following; -- An equivalent dose to the skin or to any extremity of 5 rem (0.05 Sv) or more in a year;…	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
#76 §835.402 (a)(1)(iii)	(iii) An equivalent dose to the lens of the eye of 1.5 rem (0.015 Sv) or more in a year;	***Article 511.1.a*** **(excerpt)** For the purpose of monitoring individual exposures to external radiation, personnel dosimeters shall [§835.402(a)] be provided to and used by: a. Radiological workers who, under typical conditions, are likely to receive one or more of the following; -- An equivalent dose to the lens of the eye of 1.5 rem (0.015 Sv) or more in a year;…	Compliant: 10 CFR 835
#77 §835.402(a)(2)	(2) Declared pregnant workers who are likely to receive from external sources an equivalent dose to the embryo/fetus >10% of the applicable limit at §835.206(a);	***Article 511.1.b*** **(excerpt)** For the purpose of monitoring individual exposures to external radiation, personnel dosimeters shall [§835.402(a)] be provided to and used by: b. Declared pregnant workers who are likely to receive from external sources an equivalent dose to the embryo/fetus >10% of the applicable limit at Table 2-1;	Compliant: 10 CFR 835
#78 §835.402(a)(3)	(3) Occupationally exposed minors likely to receive a dose >50% of the applicable limits at §835.207 in a year from external sources;	***Article 511.1.c*** **(excerpt)** For the purpose of monitoring individual exposures to external radiation, personnel dosimeters shall [§835.402(a)] be provided to and used by: c. Occupationally exposed minors likely to receive a dose in excess of 50% of the applicable limits at Table 2-1 in a year from external sources;	Compliant: 10 CFR 835
#79 §835.402(a)(4)	(4) Members of the public entering a controlled area likely to receive a dose >50% of the limit at §835.208 in a year from external sources; and	***Article 511.1.d*** **(excerpt)** For the purpose of monitoring individual exposures to external radiation, personnel dosimeters shall [§835.402(a)] be provided to and used by: d. Members of the public entering a controlled area likely to receive a dose >50% of the limit at Article 214 in a year from external sources, and…	Compliant: 10 CFR 835
#80 §835.402(a)(5)	(5) Individuals entering a high or very high radiation area.	***Article 511.1.e*** **(excerpt)** For the purpose of monitoring individual exposures to external radiation, personnel dosimeters shall [§835.402(a)] be provided to and used by: e. Individuals entering a high or very high radiation area.	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
#81 §835.402(b)	External dose monitoring programs implemented to demonstrate compliance with §835.402(a) shall be adequate to demonstrate compliance with the dose limits established in Subpart C of this part	***Article 512.1*** **(excerpt)** External dose monitoring programs implemented to demonstrate compliance with Article 511.1 shall [§835.402(b)] be adequate to demonstrate compliance with the dose limits listed in Chapter 2.	Compliant: 10 CFR 835
#82 §835.402(b)(1)	and shall be: (1) Accredited, or excepted from accreditation, in accordance with the DOELAP for personnel dosimetry; or	***Article 512.1*** **(excerpt)** The external dose monitoring program shall [§835.402(b)(1)] be accredited in accordance with the DOELAP for personnel dosimetry.	Compliant: 10 CFR 835
#83 §835.402(b)(2)	(2) Determined by the Secretarial Officer responsible for environment, safety, and health matters to have performance substantially equivalent to that of programs accredited under the DOELAP for personnel dosimetry.	The CPCCo dosimetry program and subcontracted dosimetry service implements a program compliant with §835.402(b)(1); consequently, §835.402(b)(2) is not applicable.	Compliant: 10 CFR 835
#84 §835.402(c)(1)	For the purpose of monitoring individual exposures to internal radiation, internal dosimetry programs (including routine bioassay programs) shall be conducted for: (1) Radiological workers who, under typical conditions, are likely to receive a committed effective dose of 0.1 rem (0.001 Sv) or more from all occupational radionuclide intakes in a year;	***Article 521.1*** **(excerpt)** For the purpose of monitoring individual exposures to internal radiation, internal dosimetry programs (including routine bioassay programs) shall [§835.402(c)]be conducted for: a. Radiological workers who, under typical conditions, are likely to receive a committed effective dose of 0.1 rem (0.001 Sv) or more from all occupational radionuclide intakes in a year… ***Article 522.7*** Bioassay analyses shall [§835.402(c)(1); Article 522.1] also be performed when any of the following occurs: a. Facial or nasal contamination is detected that indicates a potential for internal contamination; b. Airborne monitoring indicates the potential for intakes >100 mrem committed effective dose; or c. When directed by the Radiological Control organization. Note: Workers who “are likely to receive” recognizes that professional judgment and experience will be used in making decisions in specific circumstances. [DOE G 441.1-1C, Section 3.1.] This note applies to RPP #84–#87.	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
#85 §835.402(c)(2)	(2) Declared pregnant workers likely to receive an intake or intakes resulting in an equivalent dose to the embryo/fetus >10% of the limit stated at §835.206(a);	***Article 521.1*** **(excerpt)** For the purpose of monitoring individual exposures to internal radiation, internal dosimetry programs (including routine bioassay programs) shall [§835.402(c)] be conducted for: b. Declared pregnant workers likely to receive an intake or intakes resulting in an equivalent dose to the embryo/fetus >10% of the limit stated at Table 2-1…	Compliant: 10 CFR 835
#86 §835.402(c)(3)	(3) Occupationally exposed minors who are likely to receive a dose >50% of the applicable limit stated at §835.207 from all radionuclide intakes in a year; or	***Article 521.1*** **(excerpt)** For the purpose of monitoring individual exposures to internal radiation, internal dosimetry programs (including routine bioassay programs) shall [§835.402(c)] be conducted for: c. Occupationally exposed minors who are likely to receive a dose in excess of 50% of the applicable limit stated at Table 2-1 from all radionuclide intakes in a year;	Compliant: 10 CFR 835
#87 §835.402(c)(4)	(4) Members of the public entering a controlled area likely to receive a dose >50% of the limit stated at §835.208 from all radionuclide intakes in a year.	***Article 521.1*** **(excerpt)** For the purpose of monitoring individual exposures to internal radiation, internal dosimetry programs (including routine bioassay programs) shall [§835.402(c)]be conducted for: d. Members of the public entering a controlled area likely to receive a dose >50% of the limit stated at Article 214 from all radionuclide intakes in a year.	Compliant: 10 CFR 835
#88 §835.402(d)	Internal dose monitoring programs implemented to demonstrate compliance with §835.402(c) shall be adequate to demonstrate compliance with the dose limits established in Subpart C of this part and shall be:	***Article 522.1*** **(excerpt and modified)** Internal dose monitoring programs implemented to demonstrate compliance with Article 521.1 a, b, c, and d shall [§835.402(d)] be adequate to demonstrate compliance with the dose limits established in Table 2-1 and Article 214.1.	Compliant: 10 CFR 835
#89 §835.402(d)(1)	(1) Accredited, or excepted from accreditation, in accordance with the DOELAP for radiobioassay; or	***Article 522.2*** **(excerpt and modified)** The internal dose monitoring programs shall [§835.402(d)(1)] be accredited in accordance with DOELAP for radiobioassay.	Compliant: 10 CFR 835
#90 §835.402(d)(2)	(2) Determined by the Secretarial Officer responsible for environment, safety, and health matters to have performance substantially equivalent to that of programs accredited under the DOELAP for radiobioassay.	CPCCo is committed to using a laboratory that meets the DOELAP for radiobioassay requirement as part of §835.402(d)(1) as indicated above in RPP #89; consequently, §835.402(d)(2) is not applicable.	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
§835.403, "Air Monitoring"			
#91 §835.403(a)(1)	Monitoring of airborne radioactivity shall be performed: (1) Where an individual is likely to receive an exposure of 40 or more DAC-hours in a year; or	***Article 555.2* (excerpt)** Monitoring of airborne radioactivity shall [§835.403(a)] be performed: a. Where an individual is likely to receive an exposure of 40 or more DAC-hours in a year; or Note: For the purposes of this RPP, the requirements of §835.403 are met through the workplace air sampling program, which defines criteria for air sampling, including continuous air monitoring, fixed head air sampling, and grab air samples. Note: "An individual is likely to receive" recognizes that professional judgment and experience will be used in making decisions in specific circumstances [DOE G 441.1-1C, Section 3.1].	Compliant: 10 CFR 835
#92 §835.403(a)(2)	As necessary to characterize the airborne radioactivity hazard where respiratory protective devices for protection against airborne radionuclides have been prescribed.	***Article 555.2* (excerpt)** Monitoring of airborne radioactivity shall [§835.403(a)] be performed: b. As necessary to characterize the airborne radioactivity hazard where respiratory protective devices for protection against airborne radionuclides have been prescribed.	Compliant: 10 CFR 835
#93 §835.403(b)	Real-time air monitoring shall be performed as necessary to detect and provide warning of airborne radioactivity concentrations that warrant immediate action to terminate inhalation of airborne radioactive material.	***Article 555.3*** Real-time air monitoring shall [§835.403(b)] be performed as necessary to detect and provide warning of airborne radioactivity concentrations that warrant immediate action to terminate inhalation of airborne radioactive material.	Compliant: 10 CFR 835
§835.405, "Receipt of Packages Containing Radioactive Material"			
#94 §835.405(a)	If packages containing quantities of radioactive material in excess of a Type A quantity (as defined at 10 CFR 71.4) are expected to be received from radioactive material transportation, arrangements shall be made to either: (1) Take possession of the package when the carrier offers it for delivery; or (2) Receive notification as soon as practicable after arrival of the package at the carrier's terminal and to take possession of the package expeditiously after receiving such notification.	***Article 423.8* (excerpt)** If packages containing quantities of radioactive material in excess of a Type A quantity (as defined at 10 CFR 71.4) are expected to be received from radioactive material transportation, arrangements shall [§835.405(a)] be made to either: a. Take possession of the package when the carrier offers it for delivery; or	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
		b. Receive notification as soon as practicable after arrival of the package at the carrier's terminal and to take possession of the package expeditiously after receiving such notification.	
#95 §835.405(b)(1)	Upon receipt from radioactive material transportation, external surfaces of packages known to contain radioactive material shall be monitored if the package: (1) Is labeled with a Radioactive White I, Yellow II, or Yellow III label (as specified at 49 CFR 172.403 and 172.436–440); or	***Article 423.9*** **(excerpt)** Upon receipt from radioactive material transportation, external surfaces of packages known to contain radioactive material shall [§835.405(b)] be monitored if the package: a. Is labeled with a Radioactive White I, Yellow II, or Yellow III label (as specified at 49 CFR 172.403 and 172.436–440); or	Compliant: 10 CFR 835
#96 §835.405(b)(2)	(2) Has been transported as low specific activity material (as defined at 10 CFR 71.4) on an exclusive use vehicle (as defined at 10 CFR 71.4); or	***Article 423.9*** **(excerpt)** Upon receipt from radioactive material transportation, external surfaces of packages known to contain radioactive material shall [§835.405(b)] be monitored if the package: b. Has been transported as low specific activity material (as defined at 10 CFR 71.4) on an exclusive use vehicle (as defined at 10 CFR 71.4); or	Compliant: 10 CFR 835
#97 §835.405(b)(3)	(3) Has evidence of degradation, such as packages that are crushed, wet, or damaged.	***Article 423.9*** **(excerpt)** Upon receipt from radioactive material transportation, external surfaces of packages known to contain radioactive material shall [§835.405(b)] be monitored if the package: c. Has evidence of degradation, such as packages that are crushed, wet, or damaged.	Compliant: 10 CFR 835
#98 §835.405(c)(1)	The monitoring required by paragraph (b) of this section shall include: (1) Measurements of removable contamination levels, unless the package contains only special form (as defined at 10 CFR 71.4) or gaseous radioactive material; and	***Article 423.10*** **(excerpt)** The monitoring required by Article 423.9 shall [§835.405(c)] include: a. Measurements of removable contamination levels, unless the package contains only special form (as defined at 10 CFR 71.4) or gaseous radioactive material; and	Compliant: 10 CFR 835
#99 §835.405(c)(2)	(2) Measurements of the radiation levels, if the package contains a Type B quantity (as defined at 10 CFR 71.4) of radioactive material.	***Article 423.10*** **(excerpt)** The monitoring required by Article 423.9 of this manual shall [§835.405(c)] include: b. Measurements of the radiation levels, if the package contains a Type B quantity (as defined at 10 CFR 71.4) of radioactive material.	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
#100 §835.405(d)	The monitoring required by paragraph (b) of this section shall be completed as soon as practicable following receipt of the package, but not later than 8 hours after the beginning of the working day following receipt of the package.	***Article 423.11*** **(excerpt)** The monitoring required by Article 423.9 shall [§835.405(d)] be completed as soon as practicable following receipt of the package, but no later than 8 hours after the beginning of the working day following the receipt of the package. Note: A "working day" is considered the interval of time within each 24-hour period during which the building or area is routinely occupied or available for operations other than emergency activities.	Compliant: 10 CFR 835
#101 §835.405(e)	Monitoring pursuant to §835.405(b) is not required for packages transported on a DOE site which have remained under the continuous observation and control of a DOE employee or DOE contractor employee who is knowledgeable of and implements required exposure control measures.	***Article 423.12*** **(excerpt)** The monitoring required by Article 423.9 is not required for packages transported on a DOE site which have remained under the continuous observation and control of a DOE employee or DOE contractor employee who is knowledgeable of and implements required exposure control measures [§835.405(e)].	Compliant: 10 CFR 835
Subpart F, "Entry Control Program"			
§835.501, "Radiological Areas"			
#102 §835.501(a)	Personnel entry control shall be maintained for each radiological area.	***Article 330.1*** **(excerpt)** Personnel entry control shall [§835.501(a)] be maintained for each radiological area. Note: CPCCo considers entry control to include posting, barricades, control devices on entryways, visual and audible alarms, administrative procedures, locked entryways, access control systems, and/or training. The CPCCo entry control programs are used to the degree commensurate with existing and potential radiological hazards within the area.	Compliant: 10 CFR 835
#103 §835.501(b)	The degree of control shall be commensurate with existing and potential radiological hazards within the area.	***Article 330.2*** **(excerpt)** The degree of control shall [§835.501(b)] be commensurate with existing and potential radiological hazards within the area.	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
#104 §835.501(c)	One or more of the following methods shall be used to ensure control: (1) Signs and barricades; (2) Control devices on entrances; (3) Conspicuous visual and/or audible alarms; (4) Locked entrance ways; or (5) Administrative controls.	***Article 330.3*** **(excerpt)** 3. One or more of the following methods shall [§835.501(c)] be used to ensure control: a. Signs and barricades; b. Control devices on entrances; c. Conspicuous visual and/or audible alarms; d. Locked entrance ways; or e. Administrative controls.	Compliant: 10 CFR 835
#105 §835.501(d).1	Written authorizations shall be required to control entry into and perform work within radiological areas.	***Article 321*** **(excerpt)** Written authorizations shall [§835.501(d)] be required to control entry into and perform work within radiological areas. ***Article 341.1*** Radiological work activities shall [§835.501(d)] be conducted as specified by the controlling technical work document and RWP.	Compliant: 10 CFR 835
#106 §835.501(d).2	These authorizations shall specify radiation protection measures commensurate with the existing and potential hazards.	***Article 321*** **(excerpt)** These authorizations shall [§835.501(d)] specify radiation protection measures commensurate with the existing and potential hazards.	Compliant: 10 CFR 835
#107 §835.501(e)	No control(s) shall be installed at any radiological area exit that would prevent rapid evacuation of personnel under emergency conditions.	***Article 231.7*** **(excerpt)** These barriers shall [§835.501(e) and §835.502(d)] be set up such that they do not impede the intended use of emergency exits or evacuation routes. ***Article 330.4*** No control(s) shall [§835.501(e)] be installed at any radiological area exit that would prevent rapid evacuation of personnel under emergency conditions.	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
§835.502, "High and Very High Radiation Areas"			
#108 §835.502(a)(1)	The following measures shall be implemented for each entry into a high radiation area: (1) The area shall be monitored as necessary during access to determine the exposure rates to which the individuals are exposed; and	***Article 334.3.d*** **(excerpt)** The following measures shall [§835.502(a)] be implemented for each entry into a high radiation area. 1) The area shall [§835.502(a)(1)] be monitored as necessary during access to determine the dose rates to which the individuals are exposed; and Note: CPCCo implements additional administrative controls (i.e., ALARA management worksheets and enhanced radiological work planning) for work activities performed in high radiation areas.	Compliant: 10 CFR 835
#109 §835.502(a)(2)	(2) Each individual shall be monitored by a supplemental dosimetry device or other means capable of providing an immediate estimate of the individual's integrated equivalent dose to the whole body during the entry.	***Article 334.3.d*** **(excerpt)** The following measures shall [§835.502(a)] be implemented for each entry into a high radiation area. 2) Personnel dosimeters shall [§835.502(a)(2)] be worn and each individual shall be monitored by a supplemental dosimetry device or other means capable of providing an immediate estimate of the individual's integrated equivalent dose to the whole body during the entry.	Compliant: 10 CFR 835
#110 §835.502(b)	***Physical controls.*** One or more of the following features shall be used for each entrance or access point to a high radiation area where radiation levels exist such that an individual could exceed an equivalent dose to the whole body of 1 rem (0.01 Sv) in any 1 hour at 30 cm from the source or from any surface that the radiation penetrates: (1) A control device that prevents entry to the area when high radiation levels exist or upon entry causes the radiation level to be reduced below that level defining a high radiation area; (2) A device that functions automatically to prevent use or operation of the radiation source or field while individuals are in the area; (3) A control device that energizes a conspicuous visible or audible alarm signal so that the individual entering the high radiation area and the supervisor of the activity are made aware of the entry; (4) Entryways that are locked. During periods when access to the area is required, positive control over each entry is maintained;	***Appendix 3A.1*** **(excerpt)** One or more of the following features shall [§835.502(b)] be used for each entrance or access point to a high radiation area where radiation levels exist such that an individual could exceed an equivalent dose to the whole body of 1 rem (0.01 Sv) in any 1 hour at 30 cm from the source or from any surface the radiation penetrates: a. A control device that prevents entry to the area when high radiation levels exist or upon entry causes the radiation level to be reduced below that level defining a high radiation area; b. A device that functions automatically to prevent use or operation of the radiation source or field while individuals are in the area; c. A control device that energizes a conspicuous visible or audible alarm signal so that the individual entering the high radiation area and the supervisor of the activity are made aware of the entry;	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
	(5) Continuous direct or electronic surveillance that is capable of preventing unauthorized entry; (6) A control device that will automatically generate audible and visual alarm signals to alert personnel in the area before use or operation of the radiation source and in sufficient time to permit evacuation of the area or activation of a secondary control device that will prevent use or operation of the source.	d. Entryways that are locked. During periods when access to the area is required, positive control over each entry is maintained; e. Continuous direct or electronic surveillance that is capable of preventing unauthorized entry; f. A control device that will automatically generate audible and visual alarm signals to alert personnel in the area before use or operation of the radiation source and in sufficient time to permit evacuation of the area or activation of a secondary control device that will prevent use or operation of the source.	
#111 §835.502(c)	***Very high radiation areas.*** In addition to the above requirements, additional measures shall be implemented to ensure individuals are not able to gain unauthorized or inadvertent access to very high radiation areas.	***Article 334.5*** **(excerpted)** Minimum requirements for entry into very high radiation areas shall [§835.502(c)] include the controls specified in Articles 334.3. Radiological instrumentation/equipment shall [§835.502(c)] be used to verify the very high radiation field has been terminated prior to the first entry into a very high radiation area after the source has been deenergized, secured or shielded. ***Appendix 3A.2*** In addition to the above requirements, additional measures shall [§835.502(c)] be implemented to ensure individuals are not able to gain unauthorized or inadvertent access to very high radiation areas.	Compliant: 10 CFR 835
#112 §835.502(d)	No control(s) shall be established in a high or very high radiation area that would prevent rapid evacuation of personnel.	***Appendix 3A.3*** No control(s) shall [§835.502(d)] be established in a high or very high radiation area that would prevent rapid evacuation of personnel.	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
Subpart G, "Posting and Labeling"			
§835.601, "General Requirements"			
#113 §835.601(a)	Except as otherwise provided in this subpart, postings and labels required by this subpart shall include the standard radiation warning trefoil in black or magenta imposed upon a yellow background.	***Article 231.2 (excerpt)*** Except as otherwise provided in Articles 231.8 and 232.2, signs shall [§835.601(a)] contain the standard radiation symbol colored magenta or black imposed upon a yellow background. ***Article 412.3* (excerpt)** Except for otherwise provided in Article 412.6, labels shall [§835.601(a)] include the standard radiation warning trefoil in black or magenta imposed upon a yellow background.	Compliant: 10 CFR 835*
#114 §835.601(b)	Signs required by this subpart shall be clearly and conspicuously posted and may include radiological protection instructions.	***Article 231.3* (excerpt)** Signs shall [§835.601(b)] be clearly and conspicuously posted and may include radiological control instructions.	Compliant: 10 CFR 835*
#115 §835.601(c).1	The posting and labeling requirements in this subpart may be modified to reflect the special considerations of DOE activities conducted at private residences or businesses.	***Article 231.8* (excerpt and modified)** The posting requirements in this manual may be modified to reflect the special considerations of DOE activities conducted at private residences or businesses [§835.601(c)]. ***Article 412.6* (excerpt and modified)** The labeling requirements in this manual may be modified to reflect the special considerations of DOE activities conducted at private residences or businesses [§835.601(c)].	Compliant: 10 CFR 835*
#116 §835.601(c).2	Such modifications shall provide the same level of protection to individuals as the existing provisions in this subpart.	***Article 231.8* (excerpt and modified)** Such modifications shall [§835.601(c)] provide the same level of protection to individuals as the existing provisions in this manual. ***Article 412.6* (excerpt)** Such modifications shall [§835.601(c)] provide the same level of protection to individuals as the existing provisions in this manual.	Compliant: 10 CFR 835*

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
§835.602, "Controlled Areas"			
#117 §835.602(a)	Each access point to a controlled area (as defined at §835.2) shall be posted whenever radiological areas or radioactive material areas exist in the area.	***Article 232.1*** **(excerpt)** Each access point to a controlled area shall [§835.602(a)] be posted whenever radiological areas or radioactive material areas exist in the area.	Compliant: 10 CFR 835
#118 §835.602(a)	Individuals who enter only controlled areas without entering radiological areas or radioactive material areas are not expected to receive a TED of >0.1 rem (0.001 Sv) in a year.	***Article 232.1.a*** **(excerpt)** Individuals who enter only radiologically controlled areas without entering radiological areas or radioactive material areas are not expected to receive a TED of >0.1 rem (0.001 Sv) in a year [§835.602(a)].	Compliant: 10 CFR 835
#119 §835.602(b)	Signs used for this purpose may be selected by the contractor to avoid conflict with local security requirements.	***Article 232.2*** **(excerpt)** Signs used for Radiologically Controlled Areas may be selected by CPCCo to avoid conflict with local security requirements.	Compliant: 10 CFR 835
§835.603, "Radiological Areas and Radioactive Material Areas"			
#120 §835.603	Each access point to radiological areas and radioactive material areas (as defined at §835.2) shall be posted with conspicuous signs bearing the wording provided in this section.	***Article 231*** **(excerpt and modified)** Each access point to radiological areas and radioactive material areas (as defined in the Glossary of this manual) shall [§835.603] be posted with conspicuous signs bearing the wording provided in this Part.	Compliant: 10 CFR 835
#121 §835.603(a)	***Radiation area.*** The words "Caution, Radiation Area" shall be posted at each radiation area.	***Article 234.1*** **(excerpt)** Areas shall [§835.603] be posted to alert personnel to the presence of external radiation in accordance with Table 2-3 and Article 231. ***Table 2-3*** **(excerpt)** Criteria for posting radiation areas radiation area: dose rate criteria – >0.005 rem/hr and ≤0.1 rem/hr at 30 cm: posting – "CAUTION, RADIATION AREA."	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
#122 §835.603(b)	***High radiation area.*** The words "Caution, High Radiation Area" or "Danger, High Radiation Area" shall be posted at each high radiation area.	***Article 234.1*** **(excerpt)** Areas shall [§835.603] be posted to alert personnel to the presence of external radiation in accordance with Table 2-3 and Article 231. ***Table 2-3*** **(excerpt)** Criteria for posting high radiation area: dose rate criteria – > 0.1 rem/hr at 30 cm and ≤500 rad/hr at 1 m: posting – "CAUTION, HIGH RADIATION AREA" or "DANGER, HIGH RADIATION AREA."	Compliant: 10 CFR 835
#123 §835.603(c)	***Very high radiation area.*** The words "Grave Danger, Very High Radiation Area" shall be posted at each very high radiation area.	***Article 234.1*** **(excerpt)** Areas shall [§835.603] be posted to alert personnel to the presence of external radiation in accordance with Table 2-3 and Article 231. ***Table 2-3*** **(excerpt)** Criteria for posting very high radiation areas: dose rate criteria – > 500 rad/hr at 1 m: posting – "GRAVE DANGER, VERY HIGH RADIATION AREA."	Compliant: 10 CFR 835
#124 §835.603(d)	***Airborne radioactivity area.*** The words "Caution, Airborne Radioactivity Area" or "Danger, Airborne Radioactivity Area" shall be posted at each airborne radioactivity area.	***Article 235.1*** **(excerpt)** Areas shall [§835.603(d-f)] be posted to alert personnel to contamination in accordance with Table 2-4 and Article 231. ***Article 223.3*** **(excerpt)** Any area, accessible to individuals, where: (1) the concentration of airborne radioactivity, above natural background, exceeds or is likely to exceed the DAC values listed in Appendix A or Appendix C of 10 CFR 835; or (2) an individual present in the area without respiratory protection could receive an intake exceeding 12 DAC-hours in a week shall [§835.2] be posted as an airborne radioactivity area. ***Table 2-4*** **(excerpt)** Criteria for posting high contamination and airborne radioactivity areas, airborne radioactivity: criteria – concentrations 1 DAC or 12 DAC-hours/week: posting – "CAUTION" or "DANGER", "AIRBORNE RADIOACTIVITY AREA."	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
#125 §835.603(e)	***Contamination area.*** The words "Caution, Contamination Area" shall be posted at each contamination area.	***Article 222.1 (*excerpt)** A contaminated area shall [§835.603(e) and §835.603(f)] be posted as specified in Article 235 or controlled in accordance with Article 231.9. ***Article 235.1* (excerpt)** Areas shall [§835.603(d-f)] be posted to alert personnel to contamination in accordance with Table 2-4 and Article 231. ***Table 2-4* (excerpt)** Criteria for posting contamination, high contamination, and airborne radioactivity areas: criteria – removable contamination levels (dpm/100 cm^2) >1 time but ≤100 times Table 2-2 values: posting – "CAUTION, CONTAMINATION AREA."	Compliant: 10 CFR 835*
#126 §835.603(f)	***High contamination area.*** The words "Caution, High Contamination Area" or "Danger, High Contamination Area" shall be posted at each high contamination area.	***Article 222.1 (*excerpt)** A contaminated area shall [§835.603(e) and §835.603(f)] be posted as specified in Article 235 or controlled in accordance with Article 231.9. ***Article 235.1* (excerpt)** Areas shall [§835.603(d–f)] be posted to alert personnel to contamination in accordance with Table 2-4 and Article 231. ***Table 2-4* (excerpt)** Criteria for posting contamination, high contamination and airborne radioactivity areas high contamination: criteria - removable contamination levels (dpm/100 cm^2) >100 times Table 2-2 values: posting – "CAUTION" or "DANGER", HIGH CONTAMINATION AREA."	Compliant: 10 CFR 835*
#127 §835.603(g)	***Radioactive material area.*** The words "Caution, Radioactive Material(s)" shall be posted at each radioactive material area.	***Article 236.1* (excerpt)** The words "CAUTION, RADIOACTIVE MATERIAL(S)" shall [§835.603(g)] be posted at each radioactive material area.	Compliant: 10 CFR 835
§835.604, "Exceptions to Posting Requirements"			
#128 §835.604(a)	Areas may be excepted from the posting requirements of §835.603 for periods of less than 8 continuous hours when placed under continuous observation and control of an individual knowledgeable of, and empowered to implement, required access and exposure control measures.	***Article 231.9* (excerpt and modified)** Areas may be excepted from the posting requirements of 10 CFR 835 for periods of less than 8 continuous hours when placed under continuous observation and control of an individual knowledgeable of, and empowered to implement, required access and exposure control measures [§835.604(a)].	Compliant: 10 CFR 835
#129 §835.604(b)(1)	Areas may be excepted from the radioactive material area posting requirements of §835.603(g) when: (1) Posted in accordance with §835.603(a) through (f); or	***Article 236.3* (excerpt)** Areas may be excepted from the Radioactive Material Area posting when [§835.604(b)]: a. Posted as a Radiological Area; or	Compliant: 10 CFR 835

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#130 §835.604(b)(2)	(2) Each item or container of radioactive material is labeled in accordance with this subpart such that individuals entering the area are made aware of the hazard; or	***Article 236.3*** **(excerpt and modified)** Areas may be excepted from the radioactive material area posting when [§835.604(b)]: b. Each item or container of radioactive material is labeled in accordance with this manual such that individuals entering the area are made aware of the hazard; or	Compliant: 10 CFR 835
#131 §835.604(b)(3)	(3) The radioactive material of concern consists solely of structures or installed components which have been activated (i.e., by being exposed to neutron radiation or particles produced by an accelerator).	***Article 236.3*** **(excerpt)** Areas may be excepted from the radioactive material area posting when [§835.604(b)]: c. The radioactive material of concern consists solely of structures or installed components which have been activated (i.e., by being exposed to neutron radiation or particles produced by an accelerator).	Compliant: 10 CFR 835
#132 §835.604(c)	Areas containing only packages received from radioactive material transportation labeled and in non-degraded condition need not be posted in accordance with §835.603 until the packages are monitored in accordance with §835.405.	***Article 231.10*** **(excerpt)** Areas containing only packages received from radioactive material transportation labeled and in non-degraded condition need not be posted in accordance with Articles 234, 235, and 236 until the packages are monitored in accordance with Article 423 [§835.604(c)].	Compliant: 10 CFR 835
§835.605, "Labeling Items and Containers"			
#133 §835.605	Except as provided at §835.606, each item or container of radioactive material shall bear a durable, clearly visible label bearing the standard radiation warning trefoil and the words "Caution, Radioactive Material" or "Danger, Radioactive Material."	***Article 412.1*** **(excerpt)** Except as provided in Articles 411.2 and 412.2, each item or container of radioactive material shall [§835.605] bear a durable, clearly visible label bearing the standard radiation warning trefoil and the words "Caution, Radioactive Material" or "Danger, Radioactive Material." ***Article 431.10*** **(excerpt)** Accountable sealed sources and all other sealed sources having activities exceeding one-tenth of the values listed in Appendix 4A, or their storage containers, shall [§835.605] be labeled with the radiation symbol and "Caution, Radioactive Material'" or "Danger, Radioactive Material."	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
#134 §835.605	The label shall also provide sufficient information to permit individuals handling, using, or working in the vicinity of the items or containers to take precautions to avoid or control exposures.	***Article 412.1*** **(excerpt)** The label shall [§835.605] also provide sufficient information to permit individuals handling, using, or working in the vicinity of the items or containers to take precautions to avoid or control exposures.	Compliant: 10 CFR 835
§835.606, "Exceptions to Labeling Requirements"			
#135 §835.606(a)(1)	Items and containers may be excepted from the radioactive material labeling requirements of §835.605 when: (1) Used, handled, or stored in areas posted and controlled in accordance with this subpart and sufficient information is provided to permit individuals to take precautions to avoid or control exposures; or	***Article 411.2*** **(excerpt)** Items and containers of radioactive material that are used, handled, or stored within radioactive material, radiation, high radiation, very high radiation, contamination, high contamination or airborne radioactivity areas do not require specific labeling (so long as sufficient information is provided to permit individuals to take precautions to avoid or control exposures).	Compliant: 10 CFR 835
#136 §835.606(a)(2)	(2) The quantity of radioactive material is less than one-tenth of the values specified in Appendix E of this part and <0.1 Ci; or	***Article 412.2*** **(modified)** Items and containers may be excepted from the radioactive material labeling requirements of Article 412.1 when [§835.606(a)]: (a) The quantity of radioactive material is less than one-tenth of the values specified in Appendix 4A and <0.1 Ci; or	Compliant: 10 CFR 835
#137 §835.606(a)(3)	(3) Packaged, labeled, and marked in accordance with the regulations of the Department of Transportation or DOE orders governing radioactive material transportation; or	***Article 412.2*** **(excerpt)** Items and containers may be excepted from the radioactive material labeling requirements of Article 412.1 when [§835.606(a)]: (b) Packaged, labeled, and marked in accordance with the regulations of the Department of Transportation or DOE orders governing radioactive material transportation; or	Compliant: 10 CFR 835
#138 §835.606(a)(4)	(4) Inaccessible, or accessible only to individuals authorized to handle or use them, or to work in the vicinity; or	***Article 412.2*** **(excerpt)** Items and containers may be excepted from the radioactive material labeling requirements of Article 412.1 when [§835.606(a)]: (c) Inaccessible, or accessible only to individuals authorized to handle or use them, or to work in the vicinity; or	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
#139 §835.606(a)(5)	(5) Installed in manufacturing, process, or other equipment, such as reactor components, piping, and tanks; or	***Article 412.2* (excerpt)** Items and containers may be excepted from the radioactive material labeling requirements of Article 412.1 when [§835.606(a)]: (d) Installed in manufacturing, process, or other equipment, such as reactor components, piping, and tanks, or	Compliant: 10 CFR 835
#140 §835.606(a)(6)	(6) The radioactive material consists solely of nuclear weapons or their components.	***Article 412.2* (excerpt)** Items and containers may be excepted from the radioactive material labeling requirements of Article 412.1 when [§835.606(a)]: (e) The radioactive material consists solely of nuclear weapons or their components.	Compliant: 10 CFR 835
#141 §835.606(b)	Radioactive material labels applied to sealed radioactive sources may be excepted from the color specifications of §835.601(a).	***Article 412.3* (excerpt)** Radioactive material labels applied to sealed radioactive sources may be excepted from these color specifications [§835.606(b)].	Compliant: 10 CFR 835
Subpart H, "Records"			
§835.701, "General Provisions"			
#142 §835.701(a)	Records shall be maintained to document compliance with this part and with RPP required by §835.101.	***Article 711.1* (excerpt)** Radiological control records shall [§835.701(a) and §835.702(c)(1)] be maintained to document compliance with the requirements of 10 CFR 835 and with radiation protection programs required by §835.101. ***Article 712.4*** Where radiological services (for example, dosimetry and laboratory analyses) are purchased, there shall [§835.701(a)] be a clear agreement regarding records responsibility during performance of the service. Records of results should reside in the custody of the originating contract organization, except when the contracted radiological services organization is under contract with the DOE to manage and disposition the records.	Compliant: 10 CFR 835
#143 §835.701(b)	Unless otherwise specified in this subpart, records shall be retained until final disposition is authorized by DOE.	***Article 771.1* (excerpt and modified)** Unless otherwise specified in 10 CFR 835, records shall [§835.701(b)] be retained until final disposition is authorized by DOE.	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
§835.702, "Individual Monitoring Records"			
#144 §835.702(a)	Except as authorized by §835.702(b), records shall be maintained to document doses received by all individuals for whom monitoring was conducted and to document doses received during planned special exposures, unplanned doses exceeding the monitoring thresholds of §835.402, and authorized emergency exposures.	***Article 722.1*** **(excerpt)** Except as described by Article 722.11, records shall [§835.702(a)] be maintained to document doses received by all individuals for whom monitoring was conducted and to document doses received during planned special exposures, unplanned doses exceeding the monitoring thresholds of Articles 511 and 521, and authorized emergency exposures. ***Article 722.3*** **(excerpt)** Routine and special records related to radiation doses shall [§835.702(a-b)] be retained for each person monitored. ***Article 722.10*** **(excerpt)** Authorized emergency exposures and planned special exposures shall [§835.702(a), §835.702(c)(2), and §835.1301(b)] be accounted for separately, but maintained with the individual's occupational exposure records. ***Article 723.1*** **(excerpt)** The complete records of radiological incidents and occurrences involving personnel dose shall [§835.702(a), §835.702(c)(2), and §835.1301(b)] be retained. ***Article 731*** **(excerpt)** Records of doses (including zero dose) received by all members of the public for whom monitoring was performed shall [§835.702(a)] be maintained.	Compliant: 10 CFR 835
#145 §835.702(b)	Recording of the non-uniform equivalent dose to the skin is not required if the dose is <2% of the limit specified for the skin at §835.202(a)(4). Recording of internal dose (committed effective dose or committed equivalent dose) is not required for any monitoring result estimated to correspond to an individual receiving <0.01 rem (0.1 mSv) committed effective dose. The bioassay or air monitoring result used to make the estimate shall be maintained in accordance with §835.703(b) and the unrecorded internal dose estimated for an individual in a year shall not exceed the applicable monitoring threshold at §835.402(c).	***Article 722.1.a*** **(excerpt)** The results of individual external and internal dose monitoring that is performed, but not required by Articles 511 and 521, shall [§835.702(b)] be recorded. ***Article 722.3*** **(excerpt)** Routine and special records related to radiation doses shall [§835.702(a-b)] be retained for each person monitored. ***Article 722.11*** **(excerpt)** Recording of the non-uniform equivalent dose to the skin is not required if the dose is <2% of the limit specified for the skin at Table 2-1 [§835.702(b)]. ***Article 722.12*** **(excerpt)**	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
		Recording of internal dose (committed effective dose or committed equivalent dose) is not required for any monitoring result estimated to correspond to an individual receiving <0.01 rem (0.1 mSv) committed effective dose. The bioassay or air monitoring result used to make the estimate shall be maintained in accordance with §835.703(b), and the unrecorded internal dose estimated for any individual in a year shall not exceed the applicable monitoring threshold at § 835.402(c). ***Table 2-1* (excerpt and modified)** General employee: Skin and extremities: 50 rem	
#146 §835.702(c)(1)	The records required by this section shall: (1) Be sufficient to evaluate compliance with Subpart C of this part;	***Article 711.1* (excerpt)** Radiological control records shall [§835.701(a) and §835.702(c)(1)] be maintained to document compliance with the requirements of 10 CFR 835 and with RPPs required by 10 CFR 835.101, "Radiation Protection Programs." ***Article 722.2*.a (excerpt)** Individual monitoring records required by Article 722 shall [§835.702(c)]: a. Be sufficient to evaluate compliance with Articles 213, 214, and 215.	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
#147 §835.702(c)(2)	(2) Be sufficient to provide dose information necessary to complete reports required by Subpart I of this part;	***Article 722.2.b* (excerpt and modified)** Individual monitoring records required by Article 722 shall [§835.702(c)]: b. Be sufficient to provide dose information necessary to complete reports required by Article 781… ***Article 722.9*** Records of lifetime occupational dose, including cumulative TED equivalent since January 1, 1989, shall [§835.702(c)(2) and §835.702(c)(5)] be maintained with the individual's occupational exposure records. ***Article 722.10*** Authorized emergency exposures and planned special exposures shall [§835.702(a), §835.702(c)(2), and §835.1301(b)] be accounted for separately, but maintained with the individual's occupational exposure records. ***Article 723.1*** The complete records of radiological incidents and occurrences involving personnel dose shall [§835.702(a), §835.702(c)(2), and §835.1301(b)] be retained. ***Article 731*** Records of doses (including zero dose) received by all members of the public for whom monitoring was performed shall [§835.702(a)] be maintained. These records shall [§835.702(c)(2)] be sufficient to evaluate compliance with all applicable dose limits and monitoring and reporting requirements.	Compliant: 10 CFR 835
#148 §835.702 (c)(3)(i)	(3) Include the results of monitoring used to assess the following quantities for external dose received during the year: (i) The effective dose from external sources of radiation (equivalent dose to the whole body may be used as effective dose for external exposure);	***Article 722.4.b* (excerpt)** External dose records shall include the following: Quantities for external dose received during the year [§835.702(c)(3)]: The effective dose from external sources of radiation (equivalent dose to the whole body may be used as effective dose for external exposure).	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
#149 §835.702 (c)(3)(ii)	(ii) The equivalent dose to the lens of the eye;	***Article 512.2* (excerpt and modified)** Personnel exposures to the lens of the eye shall [§835.702(c)(3)] be reported separately when monitored. ***Article 722.4.b* (excerpt)** External dose records shall include the following: Quantities for external dose received during the year [§835.702(c)(3)]: The equivalent dose to the lens of the eye;	Compliant: 10 CFR 835
#150 §835.702 (c)(3)(iii)	(iii) The equivalent dose to the skin; and	***Article 512.2* (excerpt and modified)** Personnel exposures to the skin shall [§835.702(c)(3)] be reported separately when monitored. ***Article 722.4.b* (excerpt)** External dose records shall include the following: Quantities for external dose received during the year [§835.702(c)(3)]: The equivalent dose to the skin; and;	Compliant: 10 CFR 835
#151 §835.702 (c)(3)(iv)	(iv) The equivalent dose to the extremities.	***Article 512.2* (excerpt and modified)** Personnel exposures to the extremities shall [§835.702(c)(3)] be reported separately when monitored. ***Article 722.4.b* (excerpt)** External dose records shall include the following: Quantities for external dose received during the year [§835.702(c)(3)]: The equivalent dose to the extremities.	Compliant: 10 CFR 835
#152 §835.702 (c)(4)(i)	(4) Include the following information for internal dose resulting from intakes received during the year: (i) Committed effective dose;	***Article 722.5.b* (excerpt)** Internal dose records shall [§835.702(c)(4)] include the following: Information for internal dose resulting from intakes received during the year: Committed effective dose,	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
#153 §835.702 (c)(4)(ii)	(ii) Committed equivalent dose to any organ or tissue of concern; and	***Article 722.5.b* (excerpt)** Internal dose records shall [§835.702(c)(4)(ii)] include the following: Information for internal dose resulting from intakes received during the year: Committed equivalent dose to any organ or tissue of concern,	Compliant: 10 CFR 835
#154 §835.702 (c)(4)(iii)	(iii) Identity of radionuclides.	***Article 722.5.b* (excerpt)** Internal dose records shall [§835.702(c)(4)] include the following: Information for internal dose resulting from intakes received during the year: Identity of radionuclides.	Compliant: 10 CFR 835
#155 §835.702 (c)(5)(i)	(5) Include the following quantities for the summation of the external and internal dose: (i) TED in a year;	***Article 722.7.a* (excerpt)** Include the following quantities for the summation of the external and internal dose: (a) TED in a year:	Compliant: 10 CFR 835
#156 §835.702 (c)(5)(ii)	(ii) For any organ or tissue assigned an internal dose during the year, the sum of the equivalent dose to the whole body from external exposures and the committed equivalent dose to that organ or tissue; and	***Article 722.7.b* (excerpt)** Include the following quantities for the summation of the external and internal dose: (b) For any organ or tissue assigned an internal dose during the year, the sum of the equivalent dose to the whole body from external exposures and the committed equivalent dose to that organ or tissue; and:	Compliant: 10 CFR 835
#157 §835.702 (c)(5)(iii)	(iii) Cumulative TED.	***Article 722.7.c* (excerpt)** Include the following quantities for the summation of the external and internal dose: (c) Cumulative TED.	Compliant: 10 CFR 835
#158 §835.702(c)(6)	(6) Include the equivalent dose to the embryo/fetus of a declared pregnant worker.	***Article 722.8* (excerpt)** The equivalent dose to the embryo/fetus of a declared pregnant worker shall [§835.702(c)(6)] be maintained with the occupational exposure records for that worker.	Compliant: 10 CFR 835

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#159 §835.702(d).1	Documentation of all occupational doses received during the current year, except for doses resulting from planned special exposures conducted in compliance with §835.204 and emergency exposures authorized in accordance with §835.1302(d), shall be obtained to demonstrate compliance with §835.202(a).	***Article 722.1.c* (excerpt and modified)** Documentation of all occupational doses received during the current year, except for doses resulting from planned special exposures conducted in compliance with Article 213.3 and emergency exposures authorized in accordance with Article 213.4, shall [§835.702(d)] be obtained to demonstrate compliance with dose limits in Table 2-1 for general employees.	Compliant: 10 CFR 835
#160 §835.702(d).2	If complete records documenting previous occupational dose during the year cannot be obtained, a written estimate signed by the individual may be accepted to demonstrate compliance.	***Article 722.1.c* (excerpt and modified)** If complete records documenting previous occupational dose during the year cannot be obtained, a written estimate signed by the individual may be accepted to demonstrate compliance [§835.702(d)].	Compliant: 10 CFR 835
#161 §835.702(e)	For radiological workers whose occupational dose is monitored in accordance with §835.402, reasonable efforts shall be made to obtain complete records of prior years' occupational internal and external doses.	***Article 721.1* (excerpt)** For radiological workers whose occupational dose is monitored in accordance with Articles 511 and 521, reasonable efforts shall [§835.702(e)] be made to obtain complete records of prior years' occupational internal and external doses. Note: CPCCo will apply the guidance identified in DOE G 441.1-1C, Section 13.2.0.3 to identify "reasonable efforts shall be made." More than one attempt will be made to obtain exposure information.	Compliant: 10 CFR 835
#162 §835.702(f)	The records specified in this section that are identified with a specific individual shall be readily available to that individual.	***Article 722.2.c* (excerpt)** Radiation dose records shall [§835.702(f)] contain information sufficient to identify each person, including social security, employee number, or other unique identification number. ***Article 781.5* (excerpt)** The records specified in Articles 721 and 722 that are identified with a specific individual shall [§835.702(f)] be readily available to that individual.	Compliant: 10 CFR 835
#163 §835.702(g)	Data necessary to allow future verification or reassessment of the recorded doses shall be recorded.	***Article 722.3* (excerpt)** Procedures, data, and supporting information necessary for future verification or reassessment of the recorded doses shall [§835.702(g); be recorded.	Compliant: 10 CFR 835

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#164 §835.702(h)	All records required by this section shall be transferred to the DOE upon cessation of activities at the site that could cause exposure to individuals.	***Article 771.1*** **(excerpt)** All individual monitoring records required by Articles 721, 722, and 731, shall [§835.702(h)] be transferred to DOE upon cessation of activities that could cause exposure to individuals.	Compliant: 10 CFR 835
§835.703, "Other Monitoring Records"			
#165 §835.703(a)	The following information shall be documented and maintained: Results of monitoring for radiation and radioactive material as required by Subparts E and L of this part, except for monitoring required by §835.1102(d);	***Article 751.1*** **(excerpt)** Results of monitoring for radiation and radioactive material as required by Articles 421 and 423, and Chapter 5, Part 5 shall [§835.703(a) be documented and maintained. ***Article 752.1*** **(excerpt)** In addition to the elements provided in Article 751, records of radiation surveys shall [§835.703(a)] include, at a minimum, the following information: a. Instrument model and serial number b. Results of the measurements of area dose rates ***Article 753.1*** **(excerpt)** In addition to the elements provided in Article 751, records of airborne radioactivity shall [§835.703(a)] include, at a minimum, the following information: a. Model and serial numbers of the sampler and laboratory counting instrument (when available) or unique identifier of each sampler and instrument. b. Location of fixed air samplers c. Location of portable air samplers used for a survey d. Air concentrations in general airborne areas and breathing zones e. Supporting parameters, including collection efficiency, flow rate, duration of sampling, correction factors, and filter medium. ***Article 754.1*** **(excerpt)** In addition to the elements required by Article 751, records of contamination surveys shall [§835.703(a)] include, at a minimum, the following information: a. Model and serial number of counting equipment.	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
		b. Contamination levels (using appropriate units) and appropriate supporting parameters including counting efficiency, counting time, correction factors, type of radiation, and whether the contamination was fixed or removable. c. Location of areas found to contain hot particles or high concentrations of localized contamination. d. Follow-up survey results for decontamination processes cross-referenced to the original survey.	
#166 §835.703(b)	Results of monitoring used to determine individual occupational dose from external and internal sources;	***Article 722.4.a*** External dose records shall include the following: Results of monitoring used to determine individual occupational dose from external sources shall [§835.703(b)] be documented and maintained and include applicable extremity, skin, eye and whole body dose results measured with personnel dosimeters, including all multiple dosimeter badging results and area monitoring records; ***Article 722.4.c* (excerpt)** External dose records shall include the following: Evaluations resulting from anomalous dose results such as unexpected high or low doses; ***Article 722.4.d* (excerpt)** External dose records shall include the following: Dose reconstructions from lost or damaged dosimeters, or for unbadged workers; and ***Article 722.4.e* (excerpt)** External dose records shall include the following: Evaluations of non-uniform radiation doses. ***Article 722.5.a* (excerpt)** Internal dose records shall [§835.702(c)(4)] include the following: Results of monitoring used to determine individual occupational dose from internal sources shall [§835.703(b)] be documented and maintained. ***Article 723.3* (excerpt)** Area monitoring dosimetry results used for dose reconstruction shall [§835.703(b)] be maintained.	Compliant: 10 CFR 835

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#167 §835.703(c)	Results of monitoring for the release and control of material and equipment as required by §835.1101; and	***Article 421.5* (excerpt)** The results of monitoring for the release and control of material and equipment shall [§835.703(c)] be documented and maintained…	Compliant: 10 CFR 835
#168 §835.703(d)	Results of maintenance and calibration performed on instruments and equipment as required by §835.401(b).	***Article 563.1* (excerpt)** Calibration facilities shall [§835.703(d)] take the following actions: Generate records of calibration, functional tests, and maintenance in accordance with the referenced standards. ***Article 761.1* (excerpt and modified)** Results of calibrations performed on instruments and equipment used for monitoring individuals, materials, and areas as required by this Manual shall [§835.703(d)] be documented and maintained… ***Article 761.3* (excerpt)** Documentation of instrument operational checks shall [§835.703(d)] be maintained for a period not less than the calibration period of the instrument or equipment. ***Article 761.4* (excerpt)** Maintenance histories, including the nature of any defects and corrective actions taken, and calibration results for each instrument or equipment shall [§835.703(d)] be created and retained. ***Article 762* (excerpt)** Records of additional tests and checks of instrumentation or equipment used in conjunction with a suspected overexposure, questionable indication or unusual occurrence shall be retained. In addition, records of special instrument calibrations and modifications made in accordance with Article 561.6 shall [§835.703(d)] be retained. Note: Calibration records are only maintained for §835.703(d) compliance when instruments are used for occupational radiation protection per 10 CFR 835.	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
§835.704, "Administrative Records"			
#169 §835.704(a)	Training records shall be maintained, as necessary, to demonstrate compliance with §835.901.	***Article 612.3* (excerpt)** Documentation of previous training shall [§835.704(a)] include the individual's name, date of training, topics covered, and name of the certifying official. ***Article 724.1, 2, 3, 5, 6* (3-6 are excerpts)** 1. Records of training and qualification in radiological control shall [§835.704(a)] be maintained to demonstrate that a person received appropriate information to perform the work assignment in a safe manner. Qualification standard records shall [§835.704(a)] be retained for on-the-job and practical factor training, as well as for formal classroom training. 2. Personnel training records shall [§835.704(a)] be controlled and retained. At a minimum, these records shall include the following: a. Course title b. Attendance sheets with instructor's name c. Employee's name, identification number, and signature d. Date of training e. Identification of the examination or evaluation form, including sufficient data to identify which test each person completed f. Verification document or record confirming satisfaction of the training requirement g. Documentation related to exceptions for training requirements and extensions of qualification h. Quizzes, tests, responses, and acknowledgements of training, with the date and signature of the person trained i. Special instructions to individuals concerning prenatal radiation dose, acknowledged by the individual's signature. 3. Records shall [§835.704(a)] be retained for the following types of radiation safety training: • General Employee Radiological Training • Radiological Worker training • Periodic retraining	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
		• Training of RCTs • Members of the public training • Instructor training for those providing radiation safety training • Training of other radiological control personnel and • Training of radiation-generating device operators 5. The following instructional material shall [§835.704(a)] be maintained: a. Course name, with revision and approval date b. Instructor's manuals, course content, or lesson plans containing topical outlines. c. Video and audio instructional materials including the dates and lessons for which they were used. d. Handouts or other materials retained with the master copy of the course e. Job-specific training documents, such as instrument use, radiological procedures, RWP special training requirements, pre-job briefings, and mock-up training. 6. Documentation of training and qualification received at another DOE location need not be duplicated.	
#170 §835.704(b)	Actions taken to maintain occupational exposures ALARA, including the actions required for this purpose by §835.101, as well as facility design and control actions required by §§835.1001, §835.1002, and §835.1003, shall be documented.	***Article 742*** **(excerpt)** Actions taken to maintain occupational exposures ALARA including actions required for this purpose in the RPP, as well as facility design and control actions required by Articles 125 and 311, shall [§835.704(b)] be documented. Note: "Actions taken to maintain..." means the seven elements of an occupational ALARA program, as recommended in the RPP guide, DOE G 441.1-1C, Section 4.2.0.	Compliant: 10 CFR 835
#171 §835.704(c)	Records shall be maintained to document the results of internal audits and other reviews of program content and implementation.	***Article 743*** **(excerpt)** Records shall [§835.704(c)] be maintained to document the results of internal audits and other reviews of RPP content and implementation.	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
#172 §835.704(d)	Written declarations of pregnancy, including the estimated date of conception, and revocations of declarations of pregnancy shall be maintained.	***Article 215.1* (excerpt)** After a female worker voluntarily notifies her employer in writing that she is pregnant, for the purpose of fetal/embryo dose protection, she is considered a declared pregnant worker. ***Article 215.3* (excerpt)** This declaration may be revoked, in writing, at any time by the declared pregnant worker. ***Article 723.2* (excerpt)** Written declarations of pregnancy, including the estimated date of conception, and revocations of declarations of pregnancy shall [§835.704(d)] be maintained.	Compliant: 10 CFR 835
#173 §835.704(e)	Changes in equipment, techniques, and procedures used for monitoring shall be documented.	***Article 712.5*** Changes in equipment, techniques, and procedures used for monitoring shall [§835.704(e)] be documented.	Compliant: 10 CFR 835
#174 §835.704(f)	Records shall be maintained as necessary to demonstrate compliance with the requirements of §835.1201 and §835.1202 for sealed radioactive source control, inventory, and source leak tests.	***Article 755.1* (excerpt)** Records shall [§835.704(f)] be maintained as necessary to demonstrate compliance with the requirements of Article 431 for sealed radioactive source control, inventory, and source leak tests. ***Article 755.2*** In addition to the elements provided in Article 751, records of sealed radioactive source leak tests shall [§835.704(f); 835.1201 and 835.1202] include, at a minimum, the following information: a. Model and serial number of counting equipment b. Contamination levels (using appropriate units) and appropriate supporting parameters including counting efficiency, counting time, correction factors, and type of radiation c. Corrective actions for leaking sources. ***Article 755.3*** Records of sealed radioactive source inventories shall [§835.704(f); 835.1202(a)] include, at a minimum, the following information: a. The physical location of each accountable sealed radioactive source	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
		b. Verification of the presence and adequacy of associated postings and labels c. Verification of the adequacy of storage locations, containers, and devices.	
Subpart I, "Reports to Individuals"			
§835.801, "Reports to Individuals"			
#175 §835.801(a)	Radiation exposure data for individuals monitored in accordance with §835.402 shall be reported as specified in this section.	***Article 781.1*** Radiation exposure data for individuals monitored in accordance with Articles 511.1, 512.1, 521.1.a-d, 522.1, 522.2, and 522.7 shall [§835.801(a)] be reported as specified in this manual.	Compliant: 10 CFR 835
#176 §835.801(a)	The information shall include the data required under §835.702(c).	***Article 781.1*** The information shall [§835.801(a)] include the data required under Article 722.2, 722.4.b, 722.5.b, 722.7, and 722.8.	Compliant: 10 CFR 835
#177 §835.801(a)	Each notification and report shall be in writing and include the DOE site or facility name, the name of the individual, and the individual's social security number, employee number, or other unique identification number.	***Article 781.1* (excerpt)** Each notification and report shall [§835.801(a)] be in writing and include the DOE site or facility name, the name of the individual, and the individual's social security number, employee number, or other unique identification number.	Compliant: 10 CFR 835
#178 §835.801(b)	Upon the request from an individual terminating employment, records of exposure shall be provided to that individual as soon as the data are available, but not later than 90 days after termination.	***Article 781.2* (excerpt)** Upon the request from an individual terminating employment, records of exposure shall [§835.801(b)] be provided to that individual as soon as the data are available, but not later than 90 days after termination.	Compliant: 10 CFR 835
#179 §835.801(b)	A written estimate of the radiation dose received by that employee based on available information shall be provided at the time of termination, if requested.	***Article 781.3* (excerpt)** A written estimate of the radiation dose received by that employee based on available information shall [§835.801(b)] be provided at the time of termination, if requested.	Compliant: 10 CFR 835
#180 §835.801(c)	Each DOE- or DOE contractor-operated site or facility shall, on an annual basis, provide a radiation dose report to each individual monitored during the year at that site or facility in accordance with §835.402.	***Article 781.4*** Each DOE- or DOE contractor-operated site or facility shall [§835.801(c)], on an annual basis, provide a radiation dose report to each individual monitored during the year at that site or facility in accordance with Articles 511 and 521.	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
#181 §835.801(d)	Detailed information concerning any individual's exposure shall be made available to the individual upon request of that individual, consistent with the provisions of the *Privacy Act (5 U.S.C. 552a).*	***Article 781.5* (excerpt)** Detailed information concerning any individual's exposure shall [§835.801(d)] be made available to the individual upon request of that individual, consistent with the provisions of the *Privacy Act (5 U.S.C. 552a).*	Compliant: 10 CFR 835
#182 §835.801(e)	When a DOE contractor is required to report to the Department, pursuant to Departmental requirements for occurrence reporting and processing, any exposure of an individual to radiation and/or radioactive material or planned special exposure in accordance with §835.204(e), the contractor shall also provide that individual with a report on his or her exposure data included therein.	***Article 781.6* (excerpt)** When a DOE contractor is required to report to the Department, pursuant to Departmental requirements for occurrence reporting and processing, any exposure of an individual to radiation and/or radioactive material, or planned special exposure in accordance with Article 213.3, the contractor shall [§835.801(e)] also provide that individual with a report on his or her exposure data included therein. Note: "Departmental requirements" means DOE O 231.1B, Current Version.	Compliant: 10 CFR 835
#183 §835.801(e)	Such report shall be transmitted at a time not later than the transmittal to the Department.	***Article 781.6* (excerpt)** Such report shall [§835.801(e)] be transmitted at a time not later than the transmittal to the Department.	Compliant: 10 CFR 835
Subpart J, "Radiation Safety Training"			
§835.901, "Radiation Safety Training"			
#184 §835.901(a)	Each individual shall complete radiation safety training on the topics established at §835.901(c) commensurate with the hazards in the area and the required controls:	***Article 613.4* (modified)** General Employee Radiation Training (GERT): Each individual shall [§835.901(a)] complete radiation safety training on the topics established in Article 613.1 commensurate with the hazards in the area and the required controls: ***Article 621.1*** Individuals shall [§835.901(a)] complete GERT in accordance with requirements of Article 613.4. Proof of completion of a DOE site or activity radiation worker qualification satisfies the requirements for GERT. ***Article 621.2*** Individuals who maintain qualifications as Radiological Worker I, Radiological Worker II, or RCT, satisfy the requirements for GERT [§835.901(a)]. ***Article 622.1* (excerpt)** Members of the public shall [§835.901(a)] receive radiation safety training prior to being permitted unescorted access to controlled areas.	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
		a. This training shall [§835.901(c)] address the radiation safety topics in Article 613.1 to the extent appropriate for the degree of exposure to radiological hazards that may be encountered.	
#185 §835.901(a)(1)	(1) Before being permitted unescorted access to controlled areas; and	***Article 331.1*** **(excerpt)** Successful completion of GERT is required for unescorted entry into controlled areas. ***Article 613.4.a*** **(excerpt)** GERT: Each individual shall [§835.901(a)] complete radiation safety training on the topics established in Article 613.1 commensurate with the hazards in the area and the required controls: a. Before being permitted unescorted access to controlled areas; and	Compliant: 10 CFR 835
#186 §835.901(a)(2)	(2) Before receiving occupational dose during access to controlled areas at a DOE site or facility.	***Article 613.4.b*** **(excerpt)** GERT: Each individual shall [§835.901(a)] complete radiation safety training on the topics established in Article 613.1 commensurate with the hazards in the area and the required controls: b. Before receiving occupational dose during access to controlled areas at a DOE site or facility.	Compliant: 10 CFR 835
#187 §835.901(b)	Each individual shall demonstrate knowledge of the radiation safety training topics established at §835.901(c), commensurate with the hazards in the area and required controls, by successful completion of an examination and performance demonstrations:	***Article 613.6*** **(excerpt)** Each individual shall [§835.901(b)] demonstrate knowledge of the radiation safety training topics established in Article 613.1, commensurate with the hazards in the area and required controls, by successful completion of an examination and performance demonstrations: ***Article 613.10*** **(excerpt)** Examinations for Radiological Worker I and II training and RCT qualification shall [§835.901(b)] be used to demonstrate satisfactory completion of theoretical and classroom material.	Compliant: 10 CFR 835
#188 §835.901(b)(1)	(1) Before being permitted unescorted access to radiological areas; and	***Article 613.6.a*** **(excerpt)** a. Before being permitted unescorted access to radiological areas; and	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
#189 §835.901(b)(2)	(2) Before performing unescorted assignments as a radiological worker.	***Article 613.6.b*** **(excerpt)** b. Before performing unescorted assignments as a radiological worker.	Compliant: 10 CFR 835
#190 §835.901(c)	Radiation safety training shall include the following topics, to the extent appropriate to each individual's prior training, work assignments, and degree of exposure to potential radiological hazards:	***Article 613.1*** **(excerpt)** Radiation safety training shall [§835.901(c)] include the following topics, to the extent appropriate to each individual's prior training, work assignments, and degree of exposure to potential radiological hazards: Note: CPCCo will apply the guidance identified in DOE G 441.1-1C, Section 14.2 toward the implementation of CPCCo RPP procedures and training. Application of this approach applies to RPP #190–#196.	Compliant: 10 CFR 835
#191 §835.901(c)(1)	(1) Risks of exposure to radiation and radioactive materials, including prenatal radiation exposure;	***Article 613.1.a*** **(excerpt)** Radiation safety training shall [§835.901(c)] include the following topics, to the extent appropriate to each individual's prior training, work assignments, and degree of exposure to potential radiological hazards: a. Risks of exposure to radiation and radioactive materials, including prenatal radiation exposure;	Compliant: 10 CFR 835
#192 §835.901(c)(2)	(2) Basic radiological fundamentals and radiation protection concepts;	***Article 613.1.b*** **(excerpt)** Radiation safety training shall [§835.901(c)] include the following topics, to the extent appropriate to each individual's prior training, work assignments, and degree of exposure to potential radiological hazards: b. Basic radiological fundamentals and radiation protection concept;	Compliant: 10 CFR 835
#193 §835.901(c)(3)	(3) Physical design features, administrative controls, limits, policies, procedures, alarms, and other measures implemented at the facility to manage doses and maintain doses ALARA, including both routine and emergency actions;	***Article 613.1.c*** **(excerpt)** Radiation safety training shall [§835.901(c)] include the following topics, to the extent appropriate to each individual's prior training, work assignments, and degree of exposure to potential radiological hazards: c. Physical design features, administrative controls, limits, policies, procedures, alarms, and other measures implemented at the facility to manage doses and maintain doses ALARA, including both routine and emergency actions;;	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
#194 §835.901(c)(4)	(4) Individual rights and responsibilities as related to implementation of the facility RPP;	***Article 613.1.d*** **(excerpt)** Radiation safety training shall [§835.901(c)] include the following topics, to the extent appropriate to each individual's prior training, work assignments, and degree of exposure to potential radiological hazards: d. Individual rights and responsibilities as related to implementation of the facility RPP;	Compliant: 10 CFR 835
#195 §835.901(c)(5)	(5) Individual responsibilities for implementing ALARA measures required by §835.101; and	***Article 613.1.e*** **(excerpt)** Radiation safety training shall [§835.901(c)] include the following topics, to the extent appropriate to each individual's prior training, work assignments, and degree of exposure to potential radiological hazards: e. Individual responsibilities for implementing ALARA measures; and	Compliant: 10 CFR 835
#196 §835.901(c)(6)	(6) Individual exposure reports that may be requested in accordance with §835.801.	***Article 613.1.f*** **(excerpt)** Radiation safety training shall [§835.901(c)] include the following topics, to the extent appropriate to each individual's prior training, work assignments, and degree of exposure to potential radiological hazards: f. Individual exposure reports that may be requested in accordance with Articles 781.1–781.6.	Compliant: 10 CFR 835
#197 §835.901(d)(1)	When an escort is used in lieu of training in accordance with paragraph (a) or (b) of this section, the escort shall: (1) Have completed radiation safety training, examinations, and performance demonstrations required for entry to the area and performance of the work; and	***Article 635.1*** **(excerpt)** When an escort is used in lieu of training in accordance with Article 613.4 and 613.6, the escort shall [§835.901(d)]: a. Have completed radiation safety training, examinations, and performance demonstrations required for entry to the area and performance of the work; and	Compliant: 10 CFR 835
#198 §835.901(d)(2)	(2) Ensure that all escorted individuals comply with the documented RPP.	***Article 635.1*** **(excerpt)** When an escort is used in lieu of training in accordance with Article 613.4 and 613.6, the escort shall [§835.901(d)]: b. Ensure that all escorted individuals comply with the documented radiation protection program.	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
#199 §835.901(e)	Radiation safety training shall be provided to individuals when there is a significant change to radiation protection policies and procedures that may affect the individual and at intervals not to exceed 24 months.	***Article 613.8*** **(excerpt)** Radiation safety training shall [§835.901(e)] be provided to individuals when there is a significant change to radiation protection policies and procedures that may affect the individual and at intervals not to exceed 24 months. Note: CPCCo will apply the guidance identified in DOE G 441.1-1C, Section 14.7 toward the implementation of this requirement. Application of this approach applies to RPP #199–#200.	Compliant: 10 CFR 835
#200 §835.901(e)	Such training provided for individuals subject to the requirements of §835.901(b)(1) and (b)(2) shall include successful completion of an examination.	***Article 613.8*** **(excerpt)** Such training provided for individuals subject to the requirements of Articles 613.6.a and 613.6.b shall [§835.901(e)] include successful completion of an examination.	Compliant: 10 CFR 835
Subpart K, "Design and Control"			
§835.1001, "Design and Control"			
#201 §835.1001(a)	Measures shall be taken to maintain radiation exposure in controlled areas ALARA through engineered and administrative controls.	***Article 311.1*** **(excerpt)** Measures shall [§835.1001(a)] be taken to maintain radiation exposure in controlled areas ALARA through engineered and administrative controls.	Compliant: 10 CFR 835
#202 §835.1001(a)	The primary methods used shall be physical design features (e.g., confinement, ventilation, remote handling, and shielding).	***Article 311.1.a*** **(excerpt)** The primary methods used shall [§835.1001(a)] be physical design features (e.g., confinement, ventilation, remote handling, and shielding).	Compliant: 10 CFR 835
#203 §835.1001(a)	Administrative controls shall be used only as supplemental methods to control radiation exposure.	***Article 311.1.b*** **(excerpt)** Administrative controls shall [§835.1001(a)] be used only as supplemental methods to control radiation exposure.	Compliant: 10 CFR 835
#204 §835.1001(b)	For specific activities where use of engineered controls is demonstrated to be impractical, administrative controls shall be used to maintain radiation exposures ALARA.	***Article 313.1.b*** **(excerpt)** Internal Exposure: The minimization and control of internal exposures are conducted in accordance with the following hierarchy of requirements and hazard controls: b. For specific activities where use of engineered controls is demonstrated to be impractical, administrative controls shall [§835.1001(b)] be used to maintain radiation exposures ALARA.	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
		Article 313.2 **(excerpt)** External exposures: For specific activities where use of engineered controls is demonstrated to be impractical, administrative controls shall [§835.1001(b)] be used to maintain radiation exposures ALARA.	
§835.1002, "Facility and Design Modifications"			
#205 §835.1002(a)	During the design of new facilities or modification of existing facilities, the following objectives shall be adopted: Optimization methods shall be used to assure that occupational exposure is maintained ALARA in developing and justifying facility design and physical controls.	***Article 125.1.a*** **(excerpt)** The following radiological control design criteria are provided for new facilities and modification to existing facilities: a. Optimization methods shall [§835.1002(a)] be used to assure that occupational exposure is maintained ALARA in developing and justifying facility design and physical controls. *The graded approach is applied to determining the performance of optimization activities.*	Compliant: 10 CFR 835
#206 §835.1002(b)	The design objective for controlling personnel exposure from external sources of radiation in areas of continuous occupational occupancy (2,000 hours per year) shall be to maintain exposure levels below an average of 0.5 millirem (5 μSv) per hour	***Article 125.1.b*** **(excerpt and modified)** The following radiological control design criteria are provided for new facilities and modification to existing facilities: The design objective for controlling personnel exposure from external sources of radiation in areas of continuous occupational occupancy (2,000 hours per year) shall [§835.1002(b)] be to maintain exposure levels below an average of 0.5 millirem (5 μSv) per hour…	Compliant: 10 CFR 835
#207 §835.1002(b)	and as far below this average as is reasonably achievable.	***Article 125.1.b*** **(excerpt and modified)** The following radiological control design criteria are provided for new facilities and modification to existing facilities: …and as far below this average as is reasonably achievable.	Compliant: 10 CFR 835
#208 §835.1002(b)	The design objectives for exposure rates for potential exposure to a radiological worker where occupancy differs from the above shall be ALARA and shall not exceed 20% of the applicable standards in §835.202.	***Article 125.1.b*** **(excerpt and modified)** The following radiological control design criteria are provided for new facilities and modification to existing facilities: The design objectives for exposure rates for potential exposure to a radiological worker where occupancy differs from the above shall [§835.1002(b)] be ALARA and shall [§835.1002(b)] not exceed 20% of the applicable standards in Table 2-1.	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
#209 §835.1002(c)	Regarding the control of airborne radioactive material, the design objective shall be, under normal conditions, to avoid releases to the workplace atmosphere	***Article 125.1.c* (excerpt)** The following radiological control design criteria are provided for new facilities and modification to existing facilities: Regarding the control of airborne radioactive material, the design objective shall [§835.1002(c)] be, under normal conditions, to avoid releases to the workplace atmosphere and… ***Article 313.1.a* (excerpt)** Engineered controls, including containment of radioactive material at the source wherever practicable, shall [§835.1001(a) and §835.1002(c)] be the primary method of minimizing airborne radioactivity and internal exposure to workers.	Compliant: 10 CFR 835
#210 §835.1002(c)	and in any situation, to control the inhalation of such material by workers to levels that are ALARA; confinement and ventilation shall normally be used.	***Article 125.1.c* (excerpt)** The following radiological control design criteria are provided for new facilities and modification to existing facilities: ... in any situation, to control the inhalation of such material by workers to levels that are ALARA; confinement and ventilation shall [§835.1002(c)] normally be used. ***Article 313.1.a* (excerpt)** Engineered controls, including containment of radioactive material at the source wherever practicable, shall [§835.1001(a) and §835.1002(c)] be the primary method of minimizing airborne radioactivity and internal exposure to workers.	Compliant: 10 CFR 835
#211 §835.1002(d)	The design or modification of a facility and the selection of materials shall include features that facilitate operations, maintenance, decontamination, and decommissioning.	***Article 125.1.d* (excerpt)** The following radiological control design criteria are provided for new facilities and modification to existing facilities: The design or modification of a facility and the selection of materials shall [§835.1002(d)] include features that facilitate operations, maintenance, decontamination, and decommissioning.	Compliant: 10 CFR 835
§835.1003, "Workplace Controls"			
#212 §835.1003(a)	During routine operations, the combination of engineered and administrative controls shall provide that: The anticipated occupational dose to general employees shall not exceed the limits established at §835.202; and	***Article 311.2* (excerpt)** During routine operations, the combination of engineered and administrative controls shall [§835.1003(a-b)] provide that (1) the anticipated occupational dose to general employees shall [§835.1003(a)] not exceed the limits established in Table 2-1, and	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
#213 §835.1003(b)	The ALARA process is utilized for personnel exposures to ionizing radiation.	***Article 311.2*** **(excerpt)** During routine operations, the combination of engineered and administrative controls shall [§835.1003(a–b)] provide that (2) the ALARA process is utilized for personnel exposures to ionizing radiation [§835.1003(b)].	Compliant: 10 CFR 835
Subpart L, "Radioactive Contamination Control"			
§835.1101, "Control of Material and Equipment"			
#214 §835.1101(a)(1)	Except as provided in paragraphs (b) and (c) of this section, material and equipment in contamination areas, high contamination areas, and airborne radioactivity areas shall not be released to a controlled area if: (1) Removable surface contamination levels on accessible surfaces exceed the removable surface contamination values specified in Appendix D of this part; or	***Article 421.1*** **(excerpt)** Except as provided in Articles 421.2 and 421.3, material and equipment in contamination areas, high contamination areas, and airborne radioactivity areas shall [§835.1101(a)] not be released to a controlled area if: a. Removable surface contamination levels on accessible surfaces exceed the removable surface contamination values specified in Table 2-2; or	Compliant: 10 CFR 835*
#215 §835.1101(a)(2)	(2) Prior use suggests that the removable surface contamination levels on inaccessible surfaces are likely to exceed the removable surface contamination values specified in Appendix D of this part.	***Article 421.1*** **(excerpt)** Except as provided in Articles 421.2 and 421.3, material and equipment in contamination areas, high contamination areas, and airborne radioactivity areas shall [§835.1101(a)] not be released to a controlled area if: b. Prior use suggests that the removable surface contamination levels on inaccessible surfaces are likely to exceed the removable surface contamination values specified in Table 2-2.	Compliant: 10 CFR 835*
#216 §835.1101(b)	Material and equipment exceeding the removable surface contamination values specified in Appendix D of this part may be conditionally released for movement on-site from one radiological area for immediate placement in another radiological area only if appropriate monitoring is performed and appropriate controls for the movement are established and exercised.	***Article 421.3*** **(excerpt)** Material and equipment exceeding the removable surface contamination values specified in Table 2-2 may be conditionally released for movement on-site from one radiological area for immediate placement in another radiological area only if appropriate monitoring is performed and appropriate controls for the movement are established and exercised.	Compliant: 10 CFR 835*
#217 §835.1101(c)(1)	Material and equipment with fixed contamination levels that exceed the total contamination values specified in Appendix D of this part may be released for use in controlled areas outside of radiological areas only under the following conditions:	***Article 421.2*** **(excerpt)** Material and equipment with fixed contamination levels that exceed the total surface contamination values specified in Table	Compliant: 10 CFR 835*

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
	(1) Removable surface contamination levels are below the removable surface contamination values specified in Appendix D of this part; and	2-2 may be released for use in controlled areas outside of radiological areas only under the following conditions: a. Removable surface contamination levels are below the removable surface contamination values specified in Table 2-2; and	
#218 §835.1101(c)(2)	(2) The material or equipment is routinely monitored and clearly marked or labeled to alert personnel of the contaminated status.	***Article 421.2* (excerpt)** Material and equipment with fixed contamination levels that exceed the total surface contamination values specified in Table 2-2 may be released for use in controlled areas outside of radiological areas only under the following conditions: b. The material or equipment is routinely monitored and clearly marked or labeled to alert personnel of the contaminated status.	Compliant: 10 CFR 835*
§835.1102, "Control of Areas"			
#219 §835.1102(a)	Appropriate controls shall be maintained and verified which prevent the inadvertent transfer of removable contamination to locations outside of radiological areas under normal operating conditions.	***Article 330.5* (excerpt)** Appropriate controls shall [§835.1102(a)] be maintained and verified which prevent the inadvertent transfer of removable contamination to locations outside radiological areas under normal operating conditions. ***Article 335.4* (excerpt)** Exit points from contamination, high contamination, or airborne radioactivity areas shall [§835.1102(a)] include the following: a. Step off pad located outside the exit point, contiguous with the area boundary; b. Step off pads maintained free of radioactive contamination; c. Contamination monitoring equipment located as close to the step off pad as background radiation levels permit. ***Article 335.6* (excerpt and modified)** Tools or equipment being removed from areas posted for surface or airborne radioactivity control shall [§835.1102(a)] be monitored for release in accordance with Article 421… ***Article 551.10*** Survey frequencies shall [§835.401(a) and §835.1102(a)] be established based on potential radiological conditions, probability of change in conditions, and area occupancy factors.	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
#220 §835.1102(b)	Any area in which contamination levels exceed the values specified in Appendix D of this part shall be controlled in a manner commensurate with the physical and chemical characteristics of the contaminant, the radionuclides present, and the fixed and removable surface contamination levels.	***Article 222.1* (excerpt)** Any area in which contamination levels exceed the values specified in Table 2-2 shall [§835.1102(b)] be controlled in a manner commensurate with the physical and chemical characteristics of the contaminant, the radionuclides present, and the fixed and removable surface contamination levels.	Compliant: 10 CFR 835*
#221 §835.1102(c)	Areas accessible to individuals where the measured total surface contamination levels exceed, but the removable surface contamination levels are less than, corresponding surface contamination values specified in Appendix D of this part, shall be controlled as follows when located outside of radiological areas.	***Article 222.4*** Areas accessible to individuals where the measured total surface contamination levels exceed, but the removable surface contamination levels are less than, corresponding surface contamination values specified in Table 2-2, shall [§835.1102(c)] be controlled as follows when located outside contamination areas, high contamination areas, and airborne radioactivity areas. ***Glossary (excerpt) soil contamination area:*** An area in which radioactive material exists within the top 15 cm of soil such that [§835.1102(c)]: - A direct contamination reading of the soil surface exceeds the appropriate "total" contamination levels in Appendix D, 10 CFR 835, and - The transferable contamination from the area does not exceed the appropriate "removable" levels in Appendix D, 10 CFR 835.	Compliant: 10 CFR 835*
#222 §835.1102(c)(1)	(1) The area shall be routinely monitored to ensure the removable surface contamination level remains below the removable surface contamination values specified in Appendix D of this part; and	***Article 222.4.a* (excerpt)** The area shall [§835.1102 (c)(1)]be routinely monitored to ensure the removable surface contamination level remains below the removable surface contamination values specified in Table 2-2.	Compliant: 10 CFR 835*
#223 §835.1102(c)(2)	(2) The area shall be conspicuously marked to warn individuals of the contaminated status.	***Article 222.4.c*** The area shall [§835.1102 (c)(2)] be conspicuously marked to warn individuals of the contamination status.	Compliant: 10 CFR 835*

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
#224 §835.1102(d)	Individuals exiting contamination, high contamination, or airborne radioactivity areas shall be monitored, as appropriate, for the presence of surface contamination.	***Article 221.1*** **(excerpt and modified)** Individuals exiting contamination areas, high contamination areas, or airborne radioactivity areas shall [§835.1102(d)] be monitored, as appropriate, for the presence of surface contamination. This does not apply to personnel exiting areas containing only radionuclides, such as tritium, that cannot be detected using hand-held or automatic frisking equipment. ***Article 221.2*** **(excerpt and modified)** Monitoring for contamination shall be performed using frisking equipment that can detect total contamination of at least the values specified in Table 2-2. ***Article 337.1*** **(excerpt and modified)** For activities where tritium, in oxide or elemental form, may be present additional emphasis shall be placed on worker bioassay programs and routine contamination monitoring and air sampling programs.	Compliant: 10 CFR 835
#225 §835.1102(e)	Protective clothing shall be required for entry to areas in which removable contamination exists at levels exceeding the removable surface contamination values specified in Appendix D of this part.	***Article 316.1*** **(excerpt)** Individuals shall [§835.1102(e)] wear protective clothing during the following activities: a. Handling of contaminated materials with removable contamination in excess of Table 2-2 levels b. Entry to areas in which removable contamination exists at levels exceeding the removable surface contamination values specified in Table 2-2.	Compliant: 10 CFR 835*
Subpart M, "Sealed Radioactive Source Control"			
§835.1201, "Sealed Radioactive Source Control "			
#226 §835.1201	Sealed radioactive sources shall be used, handled, and stored in a manner commensurate with the hazards associated with operations involving the sources.	***Article 431.1*** **(excerpt)** Sealed radioactive sources shall [§835.1201] be used, handled, and stored in a manner commensurate with the hazards associated with the operations involving the sources.	Compliant: 10 CFR 835
§835.1202, "Accountable Sealed Radioactive Sources"			
#227 §835.1202(a)	Each accountable sealed radioactive source shall be inventoried at intervals not to exceed six months. This inventory shall: (1) Establish the physical location of each accountable sealed radioactive source;	***Article 431.3*** **(excerpt)** Each accountable sealed radioactive source shall [§835.1202(a)] be inventoried at intervals not to exceed six months. This inventory shall [§835.1202(a)]:	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
	(2) Verify the presence and adequacy of associated postings and labels; and (3) Establish the adequacy of storage locations, containers, and devices.	a. Establish the physical location of each accountable sealed radioactive source, b. Verify the presence and adequacy of associated postings and labels, and c. Establish the adequacy of storage locations, containers, and devices.	
#228 §835.1202(b)	Except for sealed radioactive sources consisting solely of gaseous radioactive material or tritium, each accountable sealed radioactive source shall be subject to a source leak test upon receipt, when damage is suspected, and at intervals not to exceed six months. Source leak tests shall be capable of detecting radioactive material leakage equal to or exceeding 0.005 μCi.	***Article 431.4*** **(excerpt)** Except for sealed radioactive sources consisting solely of gaseous radioactive material or tritium, each accountable sealed radioactive source shall [§835.1202(b)] be subject to a source leak test upon receipt, when damage is suspected and at intervals not to exceed six months. Source leak tests shall [§835.1202(b)] be capable of detecting radioactive material leakage equal to or exceeding 0.005 μCi.	Compliant: 10 CFR 835
#229 §835.1202(c).1	Notwithstanding the requirements of paragraph (b) of this section, an accountable sealed radioactive source is not subject to periodic source leak testing if that source has been removed from service.	***Article 431.5*** **(excerpt)** Notwithstanding the requirements of Article 431.4, an accountable sealed radioactive source is not subject to periodic source leak testing if that source has been removed from service [§835.1202(c)].	Compliant: 10 CFR 835
#230 §835.1202(c).2	Such sources shall be stored in a controlled location, subject to periodic inventory as required by paragraph (a) of this section, and subject to source leak testing prior to being returned to service.	***Article 431.5*** **(excerpt)** Such sources shall [§835.1202(c)] be stored in a controlled location and subject to periodic inventory in accordance with Article 431.3 and subject to leak testing prior to being returned to service.	Compliant: 10 CFR 835
#231 §835.1202(d)	Notwithstanding the requirements of paragraphs (a) and (b) of this section, an accountable sealed radioactive source is not subject to periodic inventory and source leak testing if that source is located in an area that is unsafe for human entry or otherwise inaccessible.	***Article 431.6*** Notwithstanding the requirements of Articles 431.3 and 431.4, an accountable sealed radioactive source is not subject to periodic inventory and source leak testing if that source is located in an area that is unsafe for human entry or otherwise inaccessible [§835.1202(d)].	Compliant: 10 CFR 835
#232 §835.1202(e)	An accountable sealed radioactive source found to be leaking radioactive material shall be controlled in a manner that minimizes the spread of radioactive contamination.	***Article 431.7*** **(excerpt)** An accountable sealed radioactive source found to be leaking radioactive material shall [§835.1202(e)] be controlled in a manner that minimizes the spread of radioactive contamination.	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
Subpart N, "Emergency Exposure Situations"			
§835.1301, "General Provisions"			
#233 §835.1301(a)(1)	A general employee whose occupational dose has exceeded the numerical value of any of the limits specified in §835.202 as a result of an authorized emergency exposure may be permitted to return to work in radiological areas during the current year providing that all of the following conditions are met: (1) Approval is first obtained from the contractor management and the Head of the responsible DOE field organization;	***Article 213.4.a* (excerpt)** A general employee whose occupational dose has exceeded the numerical value of any of the limits specified in Table 2-1 as a result of an authorized emergency exposure may be permitted to return to work in radiological areas during the current year providing that all of the following conditions are met [§835.1301(a)]: • Approval is first obtained from CPCCo RPP manager and the head of the responsible DOE field organization (DOE-HFO manager);	Compliant: 10 CFR 835
#234 §835.1301(a)(2)	(2) The individual receives counseling from radiological protection and medical personnel regarding the consequences of receiving additional occupational exposure during the year; and	***Article 213.4.a* (excerpt)** A general employee whose occupational dose has exceeded the numerical value of any of the limits specified in Table 2-1 as a result of an authorized emergency exposure may be permitted to return to work in radiological areas during the current year providing that all of the following conditions are met [§835.1301(a)]: • The individual receives counseling from radiological protection and medical personnel regarding the consequences of receiving additional occupational exposure during the year; and	Compliant: 10 CFR 835
#235 §835.1301(a)(3)	(3) The affected employee agrees to return to radiological work.	***Article 213.4.a* (excerpt)** A general employee whose occupational dose has exceeded the numerical value of any of the limits specified in Table 2-1 as a result of an authorized emergency exposure may be permitted to return to work in radiological areas during the current year providing that all of the following conditions are met [§835.1301(a)]: • The affected employee agrees to return to radiological work.	Compliant: 10 CFR 835
#236 §835.1301(b)	All doses exceeding the limits specified in §835.202 shall be recorded in the affected individual's occupational dose record.	***Article 722.10* (excerpt and modified)** Authorized emergency exposures and planned special exposures shall [§835.702(a), §835.702(c)(2), and §835.1301(b)] be accounted for separately but maintained with the individual's occupational exposure records.	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
		Article 723.1 **(excerpt)** The complete records of radiological incidents and occurrences involving personnel dose shall [§835.702(a), §835.702(c)(2), and §835.1301(b)] be retained. ***Article 213.4.b*** **(excerpt)** All doses exceeding the general employee occupational dose limits specified in Table 2-1 shall [§835.1301(b)] be recorded in the affected individual's occupational dose record.	
#237 §835.1301(c)	When the conditions under which a dose was received in excess of the limits specified in §835.202, except those received in accordance with §835.204, have been eliminated, operating management shall notify the head of the responsible DOE field organization.	***Article 213.4.c*** **(excerpt)** When the conditions under which a dose was received in excess of the general employee occupational dose limits specified in Table 2-1, except those received in accordance with the planned special exposure provisions in Article 213.3, have been eliminated, operating management shall [§835.1301(c)] notify the head of the responsible DOE field organization (DOE-HFO manager).	Compliant: 10 CFR 835
#238 §835.1301(d)	Operations which have been suspended as a result of a dose in excess of the limits specified in §835.202, except those received in accordance with §835.204, may be resumed only with the approval of DOE.	***Article 213.4.d*** **(excerpt)** Operations which have been suspended as a result of a dose in excess of the General Employee occupational dose limits specified in Table 2-1, except those received in accordance with the planned special exposure provisions in Article 213.3, may [§835.1301(d)] be resumed only with the approval of DOE.	Compliant: 10 CFR 835 (2007)
§835.1302, "Emergency Exposure Situations"			
#239 §835.1302(a)	The risk of injury to those individuals involved in rescue and recovery operations shall be minimized.	***Article 213.4.e*** **(excerpt)** The risk of injury to those individuals involved in rescue and recovery operations shall [§835.1302(a)] be minimized. Note: "Risk...shall be minimized" means if alternative actions are available to meet emergency needs, then adopting the action with the lowest assessed risk of significant personnel injury shall take precedence over property loss considerations.	Compliant: 10 CFR 835
#240 §835.1302(b)	Operating management shall weigh actual and potential risks against the benefits to be gained.	***Article 213.4.e*** **(excerpt)** Operating management shall [§835.1302(b)] weigh actual and potential risks against the benefits to be gained.	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
#241 §835.1302(c)	No individual shall be required to perform a rescue action that might involve substantial personal risk.	***Article 213.4.e*** **(excerpt)** No individual shall [§835.1302(c)] be required to perform a rescue action that might involve substantial personal risk.	Compliant: 10 CFR 835
#242 §835.1302(d)	Each individual authorized to perform emergency actions likely to result in occupational doses exceeding the values of the limits provided at §835.202(a) shall be trained in accordance with §835.901(b) and briefed beforehand on the known or anticipated hazards to which the individual will be subjected.	***Appendix 2A*** **(excerpt)** Emergency exposure may be authorized in accordance with the provisions contained in Article 213.4. ***Article 213.4.e*** **(excerpt)** Each individual authorized to perform emergency actions likely to result in occupational doses exceeding the values of the general employee occupational dose limits provided in Table 2-1 shall [§835.1302(d)] be trained in accordance with Article 613.6 and briefed beforehand on the known or anticipated hazards to which the individual will be subjected.	Compliant: 10 CFR 835
§835.1304, "Nuclear Accident Dosimetry"			
#243 §835.1304(a)	Installations possessing sufficient quantities of fissile material to potentially constitute a critical mass, such that the excessive exposure of individuals to radiation from a nuclear accident is possible, shall provide nuclear accident dosimetry for those individuals.	***Article 515.1*** **(excerpt)** Installations possessing sufficient quantities of fissile material to potentially constitute a critical mass, such that the excessive exposure of individuals to radiation from a nuclear accident is possible, shall [§835.1304(a)] provide nuclear accident dosimetry for those individuals.	Compliant: 10 CFR 835
#244 §835.1304(b)(1)	Nuclear accident dosimetry shall include the following: (1) A method to conduct initial screening of individuals involved in a nuclear accident to determine whether significant exposures to radiation occurred;	***Article 515.2*** **(excerpt)** Nuclear accident dosimetry shall [§835.1304(b)] include the following: a. A method to conduct initial screening of individuals involved in a nuclear accident to determine whether significant exposures to radiation occurred;	Compliant: 10 CFR 835
#245 §835.1304(b)(2)	(2) Methods and equipment for analysis of biological materials;	***Article 515.2*** **(excerpt)** Nuclear accident dosimetry shall [§835.1304(b)] include the following: b. Methods and equipment for analysis of biological materials;	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
#246 §835.1304(b)(3)	(3) A system of fixed nuclear accident dosimeter units; and	***Article 515.2* (excerpt)** Nuclear accident dosimetry shall [§835.1304(b)] include the following: c. A system of fixed nuclear accident dosimeter units; and	Compliant: 10 CFR 835
#247 §835.1304(b)(4)	(4) Personal nuclear accident dosimeters.	***Article 515.2* (excerpt)** Nuclear accident dosimetry shall [§835.1304(b)] include the following: d. Personal nuclear accident dosimeters.	Compliant: 10 CFR 835
Appendices			
#248 §835 Appendix A.1	The data presented in Appendix A are to be used for controlling individual internal doses in accordance with §835.209, identifying the need for air monitoring in accordance with §835.403, and identifying and posting airborne radioactivity areas in accordance with §835.603(d).	***Article 223.3* (excerpt)** CPCCo and its subcontractors shall [§835 App. A and C] comply with the contents of 10 CFR 835, Appendices A and C [§835 App. A and C].	Compliant: 10 CFR 835
#249 §835 Appendix A.2	The DAC values are given for individual radionuclides. For known mixtures of radionuclides, determine the sum of the ratio of the observed concentration of a particular radionuclide and its corresponding DAC for all radionuclides in the mixture. If this sum exceeds unity (1), then the DAC has been exceeded. For unknown radionuclides, the most restrictive DAC (lowest value) for those isotopes not known to be absent shall be used. For any single radionuclide not listed in Appendix A with decay mode other than alpha emission or spontaneous fission and with radioactive half-life >2 hours, the DAC value shall be 4E-11 µCi/mL (1 Bq/m3). For any single radionuclide not listed in Appendix A that decays by alpha emission or spontaneous fission the DAC value shall be 2 E-13 µCi/mL (8 E-03 Bq/m3).	***Article 223.3* (excerpt)** CPCCo and its subcontractors shall [§835 App. A and C] comply with the contents of 10 CFR 835, Appendices A and C [§835 App. A and C].	Compliant: 10 CFR 835
#250 §835 Appendix A.3	The DACs for limiting radiation exposures through inhalation of radionuclides by workers are listed in this appendix. The values are based on either a stochastic (committed effective dose) dose limit of 5 rem (0.05 Sv) or a deterministic (organ or tissue) dose limit of 50 rem (0.5 Sv) per year, whichever is more limiting.	***Article 223.3* (excerpt)** CPCCo and its subcontractors shall [§835 App. A and C] comply with the contents of 10 CFR 835, Appendices A and C [§835 App. A and C].	Compliant: 10 CFR 835
#251 §835 Appendix A Note	Note: The 15 rem (0.15 Sv) dose limit for the lens of the eye does not appear as a critical organ dose limit.	***Article 223.3* (excerpt)** CPCCo and its subcontractors shall [§835 App. A and C] comply with the contents of 10 CFR 835, Appendices A and C [§835 App. A and C].	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
#252 §835 Appendix A.4	The columns in this appendix contain the following information: (1) radionuclide; (2) inhaled air DAC for Type F (fast), Type M (moderate), and Type S (slow) materials in units of µCi/mL; (3) inhaled air DAC for Type F (fast), Type M (moderate), and Type S (slow) materials in units of Bq/m3; (4) an indication of whether or not the DAC for each class is controlled by the stochastic (effective dose) or deterministic (organ or tissue) dose. The absorption types (F, M, and S) have been established to describe the absorption type of the materials from the respiratory tract into the blood. The range of half-times for the absorption types correspond to: Type F, 100% at 10 minutes; Type M, 10% at 10 minutes and 90% at 140 days; and Type S 0.1% at 10 minutes and 99.9% at 7,000 days. The DACs are listed by radionuclide, in order of increasing atomic mass, and are based on the assumption that the particle size distribution of 5 micrometers AMAD is used. For situations where the particle size distribution is known to differ significantly from 5 micrometers AMAD, appropriate corrections may be made to both the estimated dose to workers and the DACs.	***Article 223.3*** **(excerpt)** CPCCo and its subcontractors shall [§835 App. A and C] comply with the contents of 10 CFR 835, Appendices A and C [§835 App. A and C].	Compliant: 10 CFR 835
#253 §835 Appendix A, Footnote 1	A determination of whether the DACs are controlled by stochastic (*St*) or deterministic (organ or tissue) dose, or if they both give the same result (*E*), for each absorption type, is given in this column. The key to the organ notation for deterministic dose is: BS = bone surface, ET = extrathoracic, K = kidney, L =liver, and T = thyroid. A blank indicates that no calculations were performed for the absorption type shown.	***Article 223.3*** **(excerpt)** CPCCo and its subcontractors shall [§835 App. A and C] comply with the contents of 10 CFR 835, Appendices A and C [§835 App. A and C].	Compliant: 10 CFR 835
#254 Appendix A, Footnote 2	The ICRP identifies these materials as soluble or reactive gases and vapors or highly soluble or reactive gases and vapors. For tritiated water, the inhalation DAC values allow for an additional 50% absorption through the skin, as described in ICRP Publication No. 68. For elemental tritium, the DAC values include a factor that irradiation from gas within the lungs might increase the dose by 20%.	Not a requirement. ***Article 223.3*** **(excerpt)** CPCCo and its subcontractors shall [§835 App. A and C] comply with the contents of 10 CFR 835, Appendices A and C [§835 App. A and C].	Compliant: 10 CFR 835
#255 Appendix A, Footnote 3	A dash indicates no values given for this data category.	Not a requirement. ***Article 223.3*** **(excerpt)** CPCCo and its subcontractors shall [§835 App. A and C] comply with the contents of 10 CFR 835, Appendices A and C [§835 App. A and C].	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
#256 Appendix A, Footnote 4	The DAC values derived using hafnium tritide particle and are based on ‘‘observed activity’’ (i.e., only radiation emitted from the particle is considered). DAC values derived using methodology found in DOE-HDBK-1184-2004, *Radiological Control Programs for Special Tritium Compounds*.	Not a requirement. ***Article 223.3*** **(excerpt)** CPCCo and its subcontractors shall [§835 App. A and C] comply with the contents of 10 CFR 835, Appendices A and C [§835 App. A and C].	Compliant: 10 CFR 835
#257 §835 Appendix A, Footnote 5.1	These values are appropriate for protection from radon combined with its short-lived decay products and are based on information given in ICRP Publication 65, *Protection Against Radon-222 at Home and at Work*; and in DOE-STD-1121-98, *Internal Dosimetry.* The values given are for 100% equilibrium concentration conditions of the short-lived radon decay products with the parent.	***Article 223.3*** **(excerpt)** CPCCo and its subcontractors shall [§835 App. A and C] comply with the contents of 10 CFR 835, Appendices A and C [§835 App. A and C].	Compliant: 10 CFR 835
#258 §835 Appendix A, Footnote 5.2	To allow for an actual measured equilibrium concentration or a demonstrated equilibrium concentration, the values given in this table should be multiplied by the ratio (100%/actual %) or (100%/demonstrated %), respectively.	***Article 223.3*** **(excerpt)** CPCCo and its subcontractors shall [§835 App. A and C] comply with the contents of 10 CFR 835, Appendices A and C [§835 App. A and C].	Compliant: 10 CFR 835
#259 §835 Appendix A, Footnote 5.3	Alternatively, the DAC values for Rn-220 and Rn-222 may be replaced by 2.5 working level (*WL*) and 0.83 WL, respectively, for appropriate limiting of decay product concentrations. A WL is any combination of short-lived radon decay products, in one liter of air without regard to the degree of equilibrium, that will result in the ultimate emission of 1.3 E+05 MeV of alpha energy.	***Article 223.3*** **(excerpt)** CPCCo and its subcontractors shall [§835 App. A and C] comply with the contents of 10 CFR 835, Appendices A and C [§835 App. A and C].	Compliant: 10 CFR 835
#260 §835 Appendix C(a)	The data presented in Appendix C are to be used for controlling occupational exposures in accordance with §835.209, identifying the need for air monitoring in accordance with §835.403 and identifying the need for posting of airborne radioactivity areas in accordance with §835.603(d).	***Article 223.3*** **(excerpt)** CPCCo and its subcontractors shall [§835 App. A and C] comply with the contents of 10 CFR 835, Appendices A and C [§835 App. A and C].	Compliant: 10 CFR 835
#261 Appendix C(b)	The air immersion DAC values shown in this appendix are based on a stochastic dose limit of 5 rem (0.05 Sv) per year. Four columns of information are presented: (1) Radionuclide; (2) half-life in units of seconds (s), minutes (min), hours (h), days (d), or years (yr); (3) air immersion DAC in units of µCi/mL; and (4) air immersion DAC in units of Bq/m^3. The data are listed by radionuclide in order of increasing atomic mass. The air immersion DACs were calculated for a continuous, nonshielded exposure via immersion in a semi-infinite cloud of airborne radioactive material. The DACs listed in this appendix may be modified to allow for submersion in a cloud of finite dimensions.	***Article 223.3*** **(excerpt)** CPCCo and its subcontractors shall [§835 App. A and C] comply with the contents of 10 CFR 835, Appendices A and C [§835 App. A and C].	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
#262 Appendix C(c)	The DAC values are given for individual radionuclides. For known mixtures of radionuclides, determine the sum of the ratio of the observed concentration of a particular radionuclide and its corresponding DAC for all radionuclides in the mixture. If this sum exceeds unity (1), then the DAC has been exceeded. For unknown radionuclides, the most restrictive DAC (lowest value) for those isotopes not known to be absent shall be used.	***Article 223.3*** **(excerpt)** CPCCo and its subcontractors shall [§835 App. A and C] comply with the contents of 10 CFR 835, Appendices A and C [§835 App. A and C].	Compliant: 10 CFR 835
#263 §835 Appendix C, Footnote	For any single radionuclide not listed above with decay mode other than alpha emission or spontaneous fission and with radioactive half-life <2 hours, the DAC value shall be 1 E–06 µCi/mL (7 E+04 Bq/m3).	***Article 223.3*** **(excerpt)** CPCCo and its subcontractors shall [§835 App. A and C] comply with the contents of 10 CFR 835, Appendices A and C [§835 App. A and C].	Compliant: 10 CFR 835
#264	N/A – Reserved	N/A – Reserved	N/A – Reserved
#265	N/A – Reserved	N/A – Reserved	N/A – Reserved
#266	N/A – Reserved	N/A – Reserved	N/A – Reserved
#267	N/A – Reserved	N/A – Reserved	N/A – Reserved
#268	N/A – Reserved	N/A – Reserved	N/A – Reserved
#269	N/A – Reserved	N/A – Reserved	N/A – Reserved
#270 §835 Appendix D, D.1	The data presented in Appendix D are to be used in identifying the need for posting of contamination and high contamination areas in accordance with §835.603(e) and (f) and identifying the need for surface contamination monitoring and control in accordance with §835.1101 and §835.1102.	CPCCo commits to full compliance with 10 CFR 835, Appendix D, D.1, as modified by exemptions (see Chapter 10 of this RPP).	Compliant: 10 CFR 835*

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
#271 §835 Appendix D, Footnote 1	The values in this appendix, with the exception noted in footnote 6 below, apply to radioactive contamination deposited on, but not incorporated into the interior or matrix of, the contaminated item. Where surface contamination by both alpha-and beta-gamma emitting nuclides exists, the limits established for alpha- and beta-gamma-emitting nuclides apply independently.	***Table 2-2, Note 1 (modified)*** The values in this table, with the exception noted in footnote 6 below, apply to radioactive contamination deposited on, but not incorporated into the interior or matrix of, the contaminated item. Where surface contamination by both alpha- and beta-gamma-emitting nuclides exists, the limits established for alpha- and beta-gamma-emitting nuclides apply independently [§835, App. D, Note 1].	Compliant: 10 CFR 835
#272 §835 Appendix D, Footnote 2	As used in this table, dpm (disintegrations per minute) means the rate of emission by radioactive material as determined by correcting the counts per minute observed by an appropriate detector for background, efficiency, and geometric factors associated with the instrumentation.	***Table 2-2, Note 2*** As used in this table, dpm (disintegrations per minute) means the rate of emission by radioactive material as determined by correcting the counts per minute observed by an appropriate detector for background, efficiency, and geometric factors associated with the instrumentation [§835.App. D, Note 2].	Compliant: 10 CFR 835
#273 §835 Appendix D, Footnote 3	The levels may be averaged over one square meter provided the maximum surface activity in any area of 100 cm^2 is less than three times the value specified. For purposes of averaging, any square meter of surface shall be considered to be above the surface contamination value if: (1) From measurements of a representative number of sections it is determined that the average contamination level exceeds the applicable value; or (2) it is determined that the sum of the activity of all isolated spots or particles in any 100 cm^2 area exceeds three times the applicable value.	***Table 2-2, Note 3*** The levels may be averaged over one square meter provided the maximum surface activity in any area of 100 cm^2 is less than three times the value specified. For purposes of averaging, any square meter of surface shall [§835, App. D, Note 3] be considered to be above the surface contamination value if: (1) from measurements of a representative number of sections it is determined that the average contamination level exceeds the applicable value; or (2) it is determined that the sum of the activity of all isolated spots or particles in any 100 cm^2 area exceeds three times the applicable value.	Compliant: 10 CFR 835
#274 §835 Appendix D, Footnote 4	The amount of removable radioactive material per 100 cm^2 of surface area should be determined by swiping the area with dry filter or soft absorbent paper, applying moderate pressure, and then assessing the amount of radioactive material on the swipe with an appropriate instrument of known efficiency. (Note: The use of dry material may not be appropriate for tritium.) When removable contamination on objects of surface area <100 cm^2 is determined, the activity per unit area shall be based on the actual area and the entire surface shall be wiped. It is not necessary to use swiping techniques to measure removable contamination levels if direct scan surveys indicate that the total residual surface contamination levels are within the limits for removable contamination.	***Table 2-2, Note 4*** The amount of removable radioactive material per 100 cm^2 of surface area should be determined by swiping the area with dry filter or soft absorbent paper, applying moderate pressure, and then assessing the amount of radioactive material on the swipe with an appropriate instrument of known efficiency. (Note: The use of dry material may not be appropriate for tritium.) When removable contamination on objects of surface area <100 cm^2 is determined, the activity per unit area shall [§835, App. D, Note 4] be based on the actual area and the entire surface shall [§835, App. D, Note 4] be wiped. It is not necessary to use swiping techniques to measure removable contamination levels if direct scan surveys indicate that the total residual surface.	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
		contamination levels are within the limits for removable contamination.	
#275 §835 Appendix D, Footnote 5	This category of radionuclides includes mixed fission products, including the Sr-90 which is present in them. It does not apply to Sr-90 which has been separated from the other fission products or mixtures where the Sr-90 has been enriched.	***Table 2-2, Note 5*** This category of radionuclides includes mixed fission products, including the Sr-90, which is present in them. It does not apply to Sr-90 which has been separated from the other fission products or mixtures where the Sr-90 has been enriched [§835, App. D, Note 5].	Compliant: 10 CFR 835
#276 §835 Appendix D, Footnote 6	Tritium contamination may diffuse into the volume or matrix of materials. Evaluation of surface contamination shall consider the extent to which such contamination may migrate to the surface in order to ensure the surface contamination value provided in this appendix is not exceeded. Once this contamination migrates to the surface, it may be removable, not fixed; therefore, a "Total" value does not apply. In certain cases, a "Total" value of 10,000 dpm/100 cm2 may be applicable either to metals, of the types which form insoluble special tritium compounds that have been exposed to tritium; or to bulk materials to which particles of insoluble special tritium compound are fixed to a surface.	***Table 2-2, Note 6*** Tritium contamination may diffuse into the volume or matrix of materials. Evaluation of surface contamination shall [§835, App. D, Note 6] consider the extent to which such contamination may migrate to the surface in order to ensure the surface contamination value provided in this appendix is not exceeded. Once this contamination migrates to the surface, it may be removable, not fixed; therefore, a "Total" value does not apply [§835.App. D, Note 6]. In certain cases, a "Total" value of 10,000 dpm/100 cm^2 may be applicable either to metals, of the types which form insoluble special tritium compounds that have been exposed to tritium; or to bulk materials to which insoluble special tritium compound particles are fixed to a surface.	Compliant: 10 CFR 835
#277 §835 Appendix D, Footnote 7	These limits only apply to the alpha emitters within the respective decay series.	***Table 2-2, Note 7*** These limits only apply to the alpha emitters within the respective decay series [§835.App. D, Note 7].	Compliant: 10 CFR 835
#278 §835 Appendix E, AE1.01	The data presented in Appendix E are to be used for identifying accountable sealed radioactive sources and radioactive material areas as those terms are defined at §835.2(a),	CPCCo commits to full compliance with 10 CFR 835, Appendix E, AE1.01, as written. The full text of 10 CFR 835, Appendix E is included as CPCC-00175, Appendix 4A.	Compliant: 10 CFR 835
#279 §835 Appendix E, AE1.02	…establishing the need for radioactive material area posting in accordance with §835.603(g), and	CPCCo commits to full compliance with 10 CFR 835, Appendix E, AE1.02, as written. The full text of 10 CFR 835 Appendix E is included as CPCC-00175, Appendix 4A.	Compliant: 10 CFR 835

10 CFR 835 Section	Restatement of the Requirement	Policy and Commitment Basis	Compliance Status
#280 §835 Appendix E, AE1.03	…establishing the need for radioactive material labeling in accordance with §835.605.	CPCCo commits to full compliance with 10 CFR 835, Appendix E, AE1.03, as written. The full text of 10 CFR 835 Appendix E is included as CPCC-00175, Appendix 4A.	Compliant: 10 CFR 835
#281 §835 Appendix E, AE2	Any alpha emitting radionuclide not listed in Appendix E and mixtures of alpha emitters of unknown composition have a value of 10 μCi.	CPCCo commits to full compliance with 10 CFR 835, Appendix E, AE2 as written. The full text of 10 CFR 835 Appendix E is included as CPCC-00175, Appendix 4A.	Compliant: 10 CFR 835
#282 §835 Appendix E, AE3	With the exception that any type of STC has a value of 10 Ci, any radionuclide other than alpha emitting radionuclides not listed in Appendix E and mixtures of beta emitters of unknown composition have a value of 100 μCi.	CPCCo commits to full compliance with 10 CFR 835, Appendix E, AE3 as written. The full text of 10 CFR 835 Appendix E is included as CPCC-00175, Appendix 4A.	Compliant: 10 CFR 835
#283 §835 Appendix E, AE Note	Where there is involved a mixture of radionuclides in known amounts, derive the value for the mixture as follows: determine, for each radionuclide in the mixture, the ratio between the quantity present in the mixture and the value otherwise established for the specific radionuclide when not in the mixture. If the sum of such ratios for all radionuclides in the mixture exceeds unity (1), then the accountability criterion has been exceeded.	CPCCo commits to full compliance with 10 CFR 835, Appendix E, AE Note, as written. The full text of 10 CFR 835 Appendix E is included as CPCC-00175, Appendix 4A.	Compliant: 10 CFR 835

Note: References cited in this table are included in the References, Section 14.

ALARA = as low as reasonably achievable
ALI = annual limit on intake
AMAD = activity median aerodynamic diameter
CPCCo = Central Plateau Cleanup Company
DAC = derived air concentration
DOE = U.S. Department of Energy
DOELAP = U.S. Department of Energy Laboratory Accreditation Program
GERT = General Employee Radiation Training
ICRP = International Commission on Radiation Protection
N/A = not applicable
NRC = U.S. Nuclear Regulatory Commission
RCM = Radiological Control Manual
RCT = radiological control technician
RPP = Radiation Protection Program
RWP = radiological work permit
TED = total effective dose

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